



**ADDENDUM NO. 2**

**January 8, 2013**

**To:** .....All Prospective Bidders

**Subject:** .....Bid No. 9711-0/23; Pipe and Fittings for  
Water and Wastewater Service,  
Prequalification of Products and Bidders

**Bid Opening:** .....2:00 p.m., January 9, 2013

**Revised Bid Opening:**.....2:00 p.m., January 16, 2013

**This Addendum is and does become a part of the subject solicitation.**

Note the following changes:

- 1) Change the Bid Opening to 2:00 p.m., January 16, 2013.
- 2) Add the following to Section 2 Special Conditions:

**2.32 Federally Funded Purchases**

Federal funds may be used for some purchases under this solicitation. Paragraph 1.10 (Local Preference), Paragraph 1.27 (Office of the Inspector General), Paragraph 2.2 (Contract Measures and Preferences), and Paragraph 2.21 (County User Access Program (UAP) Fee) do not apply to federally funded purchases.

**All terms, covenants and conditions of the subject solicitation and any addenda issued thereto shall apply, except to the extent herein amended.**

Miami-Dade County

A handwritten signature in black ink, appearing to read "Maggie R. Reynaldos", written over a horizontal line.

Maggie R. Reynaldos  
Procurement Officer

c: Clerk of the Board



**ADDENDUM NO. 1**

**December 6, 2012.**

**To:** ..... All Prospective Bidders

**Subject:** ..... Bid No. 9711-0/23; Pipe and Fittings for  
Water and Wastewater Service,  
Prequalification of Bidders

**Original Bid Opening:** ..... 2:00 p.m., December 12, 2012

**Revised Bid Opening:** ..... 2:00 p.m., January 9, 2013

**This Addendum is and does become a part of the subject solicitation.**

Note the following changes:

- 1) Change the Bid Opening to 2:00 p.m., January 9, 2013.
- 2) In Section 2 Special Conditions (Page 2), delete Paragraph 2.3 (Pre-Invitation to Quote Conferences) in its entirety, and replace it with the following:

**2.3 Pre-Bid Conference (Recommended)**

A pre-bid conference will be held at 2:00 p.m. on Friday, December 14, 2012 at the Stephen P. Clark Center (111 N.W. First Street, Miami, FL 33128), Room No. 18-3, to discuss the conditions and specifications included within this solicitation. It is recommended that a representative of the firm attend this conference as the "cone of silence" will be lifted during the course of the conference and informal communication can take place.

Vendors are requested to bring the solicitation document to the conference, as copies may not be available.

"Multiple members of individual community councils may be present."

**All terms, covenants and conditions of the subject solicitation and any addenda issued thereto shall apply, except to the extent herein amended.**

Miami-Dade County

A handwritten signature in black ink, appearing to read "Maggie R. Reynaldos".

Maggie R. Reynaldos  
Procurement Officer

c: Clerk of the Board



**BID NO.: 9711-0/23**

**OPENING: 2:00 P.M.  
WEDNESDAY  
DECEMBER 12, 2012**

**MIAMI-DADE COUNTY, FLORIDA**

**I N V I T A T I O N  
T O B I D**

**TITLE:**

**PIPE AND FITTINGS FOR WATER AND WASTEWATER SERVICE,  
PREQUALIFICATION OF PRODUCTS AND BIDDERS**

**THE FOLLOWING ARE REQUIREMENTS OF THIS BID, AS NOTED BELOW:**

**SMALL BUSINESS ENTERPRISE MEASURE: ..... SEE SECTION 2, PARAGRAPH 2.2  
WARRANTY: ..... SEE SECTION 2, PARAGRAPH 2.19  
USER ACCESS PROGRAM: ..... SEE SECTION 2, PARAGRAPH 2.21**

**FOR INFORMATION CONTACT:**

**Maggie Reynaldos at 305-375-4435 or at [mtc@miamidade.gov](mailto:mtc@miamidade.gov)**

**IMPORTANT NOTICE TO BIDDERS:**

- READ THIS ENTIRE DOCUMENT AND HANDLE ALL QUESTIONS IN ACCORDANCE WITH SECTION 1, PARAGRAPH 1.2(D)**
- FAILURE TO COMPLETE THE CERTIFICATION REGARDING LOCAL PREFERENCE ON BID SUBMITTAL FORM IN SECTION 4 SHALL RENDER THE BIDDER INELIGIBLE FOR LOCAL PREFERENCE**
- FAILURE TO SIGN BID SUBMITTAL FORM IN SECTION 4 WILL RENDER YOUR BID NON-RESPONSIVE**



**MIAMI-DADE COUNTY, FLORIDA**

**INVITATION TO BID**

**Bid Number: 9711-0/23**

**Title: Pipe and Fittings for Water and Wastewater Service,  
Prequalification of Products and Bidders**

**Procurement Officer: Maggie R. Reynaldos, CPPB**

**Bids will be accepted until 2:00 p.m. on December 12, 2012**

**Bids will be publicly opened.** The County provides equal access and does not discriminate on the basis of disability in its programs or services. It is our policy to make all communication available to the public, including those who may be visually or hearing impaired. If you require information in a non-traditional format please call 305-375-5278.

**Instructions:** The Clerk of the Board business hours are 8:00am to 4:30pm, Monday through Friday. Additionally, the Clerk of the Board is closed on holidays observed by the County. Each Bid submitted to the Clerk of the Board shall have the following information clearly marked on the face of the envelope: the Bidders name, return address, Bid number, opening date of the Bid and the title of the Bid. Included in the envelope shall be an original and two copies of the Bid Submittal, plus attachments if applicable.

**All Bids received time and date stamped by the Clerk of the Board prior to the bid submittal deadline shall be accepted as timely submitted. The circumstances surrounding all bids received and time stamped by the Clerk of the Board after the bid submittal deadline will be evaluated by the procuring department, in consultation with the County Attorney's Office, to determine whether the bid will be accepted as timely.**

**NOTICE TO ALL BIDDERS:**

- **FAILURE TO SIGN THE BID SUBMITTAL FORM WILL RENDER YOUR BID NON-RESPONSIVE.**
- **THE BID SUBMITTAL FORM CONTAINS IMPORTANT CERTIFICATIONS THAT REQUIRE REVIEW AND COMPLETION BY ANY BIDDER RESPONDING TO THIS SOLICITATION.**

## SECTION 1 GENERAL TERMS AND CONDITIONS

### 1.1. DEFINITIONS

**Bid** – shall refer to any offer(s) submitted in response to this solicitation.

**Bidder** – shall refer to anyone submitting a Bid in response to this solicitation.

**Bid Solicitation** – shall mean this solicitation documentation, including any and all addenda.

**Bid Submittal Form** – defines the requirement of items to be purchased, and must be completed and submitted with Bid. The Bidder should indicate its name in the appropriate space on each page.

**County** – shall refer to Miami-Dade County, Florida

**ISD/PM** – shall refer to Miami-Dade County's Internal Services Department, Procurement Management Division.

**Enrolled Vendor** – shall refer to a firm that has completed the necessary documentation in order to receive Bid notifications from the County.

**Registered Vendor** – shall refer to a firm that has completed the Miami-Dade County Business Entity Registration Application and has satisfied all requirements to enter into business agreements with the County.

**The Vendor Registration Package** – shall refer to the Business Entity Registration Application.

For additional information about on-line vendor enrollment or vendor registration contact the Vendor Assistance Unit at 111 N.W. 1<sup>st</sup> Street, 13<sup>th</sup> Floor, Miami, FL 33128, Phone 305-375-5773. Vendors can enroll online and obtain forms to register by visiting our web site at [Miami-Dade County - Procurement Management - Vendor Services](http://Miami-Dade County - Procurement Management - Vendor Services).

### 1.2. INSTRUCTIONS TO BIDDERS

#### A. Bidder Qualification

It is the policy of the County to encourage full and open competition among all available qualified vendors. All vendors regularly engaged in the type of work specified in the Bid Solicitation are encouraged to submit Bids. Vendors may enroll with the County to be included on a notification list for selected categories of goods and services. To be eligible for award of a contract (including small purchase orders), Bidders must become a Registered Vendor. Only Registered Vendors can be awarded County contracts. Vendors are required to register with the County by contacting the Vendor Assistance Unit. The County endeavors to obtain the participation of all qualified small business enterprises. For information and to apply for certification, contact the Department of Small Business Development at 111 N.W. 1 Street, 19<sup>th</sup> Floor, Miami, FL 33128-1900, or telephone at 305-375-3111. County employees and board members wishing to do business with the County are referred to Section 2-11.1 of the Miami-Dade County Code relating to Conflict of Interest and Code of Ethics.

#### B. Vendor Registration

To be recommended for award the County requires that vendors complete a Miami-Dade County Vendor Registration Package. Effective June 1, 2008, a new Vendor Registration Package, including a Uniform Affidavit Packet (Affidavit form), must be completed by vendors and returned to the Internal Services Department, Procurement Management Division (ISD/PM), Vendor Assistance Unit, within fourteen (14) days of notification of the intent to recommend for award. In the event the Vendor Registration Package is not properly completed and returned within the specified time, the County may in its sole discretion, award to the next lowest responsive, responsible Bidder. The Bidder is responsible for obtaining the Vendor Registration Package, including all affidavits by downloading from the ISD/PM website at [www.miamidade.gov](http://www.miamidade.gov) or from the Vendor Assistance Unit at 111 N.W. 1<sup>st</sup> Street, 13<sup>th</sup> Floor, Miami, FL 33128. Bidders are required to affirm that all information submitted with the Vendor Registration Package is current, complete and accurate, at the time they submit a response to a Bid Solicitation, by completing the provided Affirmation of Vendor Affidavit form. In becoming a Registered Vendor with Miami-Dade County, the vendor confirms its knowledge of and commitment to comply with the following:

1. **Miami-Dade County Ownership Disclosure Affidavit**  
(Sec. 2-8.1 of the County Code)

2. **Miami-Dade County Employment Disclosure Affidavit**  
(County Ordinance No. 90-133, amending Section 2-8-1(d)(2) of the County Code)
3. **Miami-Dade County Employment Drug-free Workplace Certification**  
(Section 2-8.1.2(b) of the County Code)
4. **Miami-Dade Disability and Nondiscrimination Affidavit**  
(Article 1, Section 2-8.1.5 Resolution R182-00 Amending R-385-95)
5. **Miami-Dade County Debarment Disclosure Affidavit**  
(Section 10.38 of the County Code)
6. **Miami-Dade County Vendor Obligation to County Affidavit**  
(Section 2-8.1 of the County Code)
7. **Miami-Dade County Code of Business Ethics Affidavit**  
(Article 1, Section 2-8.1(i) and 2-11(b)(1) of the County Code through (6) and (9) of the County Code and County Ordinance No 00-1 amending Section 2-11.1(c) of the County Code)
8. **Miami-Dade County Family Leave Affidavit**  
(Article V of Chapter 11 of the County Code)
9. **Miami-Dade County Living Wage Affidavit**  
(Section 2-8.9 of the County Code)
10. **Miami-Dade County Domestic Leave and Reporting Affidavit**  
(Article 8, Section 11A-60 11A-67 of the County Code)
11. **Subcontracting Practices**  
(Ordinance 97-35)
12. **Subcontractor /Supplier Listing**  
(Ordinance 97-104)
13. **Environmentally Acceptable Packaging**  
Resolution (R-738-92)
14. **W-9 and 8109 Forms**  
The vendor must furnish these forms as required by the Internal Revenue Service.
15. **Social Security Number**  
In order to establish a file for your firm, you must provide your firm's Federal Employer Identification Number (FEIN). If no FEIN exists, the Social Security Number of the owner or individual must be provided. This number becomes your "County Vendor Number". To comply with Section 119.071(5) of the Florida Statutes relating to the collection of an individual's Social Security Number, be aware that ISD/PM requests the Social Security Number for the following purposes:
  - Identification of individual account records
  - To make payments to individual/vendor for goods and services provided to Miami-Dade County
  - Tax reporting purposes
  - To provide a unique identifier in the vendor database that may be used for searching and sorting departmental records
16. **Office of the Inspector General**  
Pursuant to Section 2-1076 of the County Code.
17. **Small Business Enterprises**  
The County endeavors to obtain the participation of all small business enterprises pursuant to Sections 2-8.2, 2-8.2.3 and 2-8.2.4 of the County Code and Title 49 of the Code of Federal Regulations.
18. **Antitrust Laws**  
By acceptance of any contract, the vendor agrees to comply with all antitrust laws of the United States and the State of Florida.
- C. **PUBLIC ENTITY CRIMES**  
Pursuant to Section 287.133(2)(a) of the Florida Statutes, a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a Bid on a contract

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to provide any goods or services to a public entity, may not submit a Bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit Bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017 of the Florida Statutes, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

#### D. Request for Additional Information

1. Pursuant to Section 2-11.1(t) of the County Code, all Bid Solicitations, once advertised and until an award recommendation has been forwarded to the appropriate authority are under the "Cone of Silence". Any communication or inquiries, except for clarification of process or procedure already contained in the solicitation, are to be made in writing to the attention of the Procurement Agent identified on the front page of the solicitation. Such inquiries or request for information shall be submitted to the procurement agent in writing and shall contain the requester's name, address, and telephone number. If transmitted by facsimile, the request should also include a cover sheet with Bidder's facsimile number. The requestor must also file a copy of this written request with the Clerk of the Board, 111 NW 1<sup>st</sup> Street, 17<sup>th</sup> Floor, suite 202, Miami, Florida 33128-1983 or email [clerkbccc@miamidade.gov](mailto:clerkbccc@miamidade.gov).
2. The Internal Services Department, Procurement Management Division may issue an addendum in response to any inquiry received, prior to Bid opening, which changes, adds to or clarifies the terms, provisions or requirements of the solicitation. The Bidder should not rely on any representation, statement or explanation whether written or verbal, other than those made in this Bid Solicitation document or in any addenda issued. Where there appears to be a conflict between this Bid Solicitation and any addenda, the last addendum issued shall prevail.
3. It is the Bidder's responsibility to ensure receipt of all addenda, and any accompanying documentation. The Bidder is required to submit with its Bid a signed "Acknowledgment of Addenda" form, when any addenda have been issued.

#### E. Contents of Bid Solicitation and Bidders' Responsibilities

1. It is the responsibility of the Bidder to become thoroughly familiar with the Bid requirements, terms and conditions of this solicitation. Pleas of ignorance by the Bidder of conditions that exist or that may exist will not be accepted as a basis for varying the requirements of the County, or the compensation to be paid to the Bidder.
2. In the event a Bidder wishes to protest any part of the General Conditions, Special Conditions and/or Technical Specifications contained in the Bid Solicitation it must file a notice of protest in writing with the issuing department no later than 48 hours prior to the Bid opening date and hour specified in the solicitation. Failure to file a timely notice of protest will constitute a waiver of proceedings.
3. This solicitation is subject to all legal requirements contained in the applicable County Ordinances, Administrative/Implementing Orders, and Resolutions, as well as all applicable State and Federal Statutes. Where conflict exists between this Bid Solicitation and these legal requirements, the authority shall prevail in the following order: Federal, State and local.
4. It is the responsibility of the Bidder/Proposer, prior to conducting any lobbying regarding this solicitation to file the appropriate form with the Clerk of the Board stating that a particular lobbyist is authorized to represent the Bidder/Proposer. The Bidder/Proposer shall also file a form with the Clerk of the Board at the point in time at which a lobbyist is no longer authorized to represent said Bidder/ Proposer. Failure of a Bidder/Proposer to file the appropriate form required, in relation to each solicitation, may be considered as evidence that the Bidder/Proposer is not a responsible contractor.

#### F. Change or Withdrawal of Bids

1. Changes to Bid - Prior to the scheduled Bid opening a Bidder may change its Bid by submitting a new Bid, (as indicated on the cover page) with a letter in writing on the firms letterhead, signed by an authorized agent stating that the new submittal replaces the original submittal. The new submittal shall contain the letter and

all information as required for submitting the original Bid. No changes to a Bid will be accepted after the Bid has been opened.

2. Withdrawal of Bid - A Bid shall be irrevocable unless the Bid is withdrawn as provided herein. Only a written letter received by ISD/PM prior to the Bid opening date may withdraw a bid. A bid may also be withdrawn ninety (90) days after the Bid has been opened and prior to award, by submitting a letter to the contact person identified on the front cover of this Bid Solicitation. The withdrawal letter must be on company letterhead and signed by an authorized agent of the Bidder.

#### G. Conflicts Within The Bid Solicitation

Where there appears to be a conflict between the General Terms and Conditions, Special Conditions, the Technical Specifications, the Bid Submittal Section, or any addendum issued, the order of precedence shall be: the last addendum issued, the Bid Submittal Section, the Technical Specifications, the Special Conditions, and then the General Terms and Conditions.

#### H. Prompt Payment Terms

1. It is the policy of Miami-Dade County that payment for all purchases by County agencies and the Public Health Trust shall be made in a timely manner and that interest payments be made on late payments. In accordance with Florida Statutes, Section 218.74 and Section 2-8.1.4 of the Miami-Dade County Code, the time at which payment shall be due from the County or the Public Health Trust shall be forty-five (45) days from receipt of a proper invoice. The time at which payment shall be due to small businesses shall be thirty (30) days from receipt of a proper invoice. All payments due from the County or the Public Health Trust, and not made within the time specified by this section, shall bear interest from thirty (30) days after the due date at the rate of one percent (1%) per month on the unpaid balance. Further, proceedings to resolve disputes for payment of obligations shall be concluded by final written decision of the County Mayor, or his or her designee(s), not later than sixty (60) days after the date on which the proper invoice was received by the County or the Public Health Trust.
2. The Bidder may offer cash discounts for prompt payments; however, such discounts will not be considered in determining the lowest price during bid evaluation. Bidders are requested to provide prompt payment terms in the space provided on the Bid submittal signature page of the solicitation.

#### I. Accounts Receivable Adjustments

In accordance with Miami-Dade County Implementing Order 3-9, Accounts Receivable Adjustments, if money is owed by the Contractor to the County, whether under this Contract or for any other purpose, the County reserves the right to retain such amount from payment due by County to the Contractor under this Contract. Such retained amount shall be applied to the amount owed by the Contractor to the County. The Contractor shall have no further claim to such retained amounts which shall be deemed full accord and satisfaction of the amount due by the County to the Contractor for the applicable payment due herein.

### 1.3. PREPARATION OF BIDS

- A. The Bid submittal form defines requirements of items to be purchased, and must be completed and submitted with the Bid. Use of any other form will result in the rejection of the Bidder's offer.
- B. The Bid submittal form must be legible. Bidders shall use typewriter, computer or ink. All changes must be crossed out and initialed in ink. Failure to comply with these requirements may cause the Bid to be rejected.
- C. An authorized agent of the Bidder's firm must sign the Bid submittal form. **FAILURE TO SIGN THE BID SUBMITTAL FORM SHALL RENDER THE BID NON-RESPONSIVE.**
- D. The Bidder may be considered non-responsive if bids are conditioned to modifications, changes, or revisions to the terms and conditions of this solicitation.
- E. The Bidder may submit alternate Bid(s) for the same solicitation provided that such offer is allowable under the terms and conditions. The alternate Bid must meet or exceed the minimum requirements and be submitted on a separate Bid submittal marked "Alternate Bid".
- F. When there is a discrepancy between the unit prices and any

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extended prices, the unit prices will prevail.

- G. An optional electronic submittal shall not be considered a part of the bid if it differs in any respect from the required manual submittal in the original hard copy.

#### 1.4. CANCELLATION OF BID SOLICITATION

Miami-Dade County reserves the right to cancel, in whole or in part, any invitation to Bid when it is in the best interest of the County.

#### 1.5. AWARD OF BID SOLICITATION

- A. This Bid may be awarded to the responsible Bidder meeting all requirements as set forth in the solicitation. The County reserves the right to reject any and all Bids, to waive irregularities or technicalities and to re-advertise for all or any part of this Bid Solicitation as deemed in its best interest. The County shall be the sole judge of its best interest.
- B. When there are multiple line items in a solicitation, the County reserves the right to award on an individual item basis, any combination of items, total low Bid or in whichever manner deemed in the best interest of the County.
- C. The County reserves the right to reject any and all Bids if it is determined that prices are excessive, best offers are determined to be unreasonable, or it is otherwise determined to be in the County's best interest to do so.
- D. The County reserves the right to negotiate prices with the low bidder, provided that the scope of work of this solicitation remains the same.
- E. Award of this Bid Solicitation will only be made to firms that have completed the Miami-Dade County Business Entity Registration Application and that satisfy all necessary legal requirements to do business with Miami-Dade County. Firms domiciled in Miami-Dade County must present a copy of their Miami-Dade County issued Local Business Tax Receipt.
- F. Pursuant to County Code Section 2-8.1(g), the Bidder's performance as a prime contractor or subcontractor on previous County contracts shall be taken into account in evaluating the Bid received for this Bid Solicitation.
- G. To obtain a copy of the Bid tabulation, Bidder(s) shall enclose an appropriately sized self-addressed stamped envelope or make a request by e-mail. Bid results will not be given by telephone or facsimile.
- H. The Bid Solicitation, any addenda and/or properly executed modifications, the purchase order, and any change order(s) shall constitute the contract.
- I. In accordance with Resolution R-1574-88, the Director of ISD/PM will decide all tie Bids.
- J. Award of this Bid may be predicated on compliance with and submittal of all required documents as stipulated in the Bid Solicitation.
- K. The County reserves the right to request and evaluate additional information from any bidder after the submission deadline as the County deems necessary.

#### 1.6. CONTRACT EXTENSION

- A. The County reserves the right to exercise its option to extend a contract for up to one hundred-eighty (180) calendar days beyond the current contract period and will notify the contractor in writing of the extension.
- B. This contract may be extended beyond the initial one hundred-eighty (180) day extension period upon mutual agreement between the County and the successful Bidder(s) upon approval by the Board of County Commissioners.

#### 1.7. WARRANTY

All warranties express and implied, shall be made available to the County for goods and services covered by this Bid Solicitation. All goods furnished shall be fully guaranteed by the successful Bidder against factory defects and workmanship. At no expense to the County, the successful Bidder shall correct any and all apparent and latent defects that may occur within the manufacturer's standard warranty. The Special Conditions of the Bid Solicitation may supersede the manufacturer's standard warranty.

#### 1.8. ESTIMATED QUANTITIES

Estimated quantities or dollars are for Bidder's guidance only: (a) estimates are based on the County's anticipated needs and/or usage

during a previous contract period and; (b) the County may use these estimates to determine the low Bidder. Estimated quantities do not contemplate or include possible additional quantities that may be ordered by other government, quasi-government or non-profit entities utilizing this contract under the Joint Purchase portion of the County User Access Program (UAP) described in Section 2.21 of this contract solicitation and the resulting contract, if that section is present in this solicitation document. No guarantee is expressed or implied as to quantities or dollars that will be used during the contract period. The County is not obligated to place any order for the given amount subsequent to the award of this Bid Solicitation.

#### 1.9. NON-EXCLUSIVITY

It is the intent of the County to enter into an agreement with the successful Bidder that will satisfy its needs as describe herein. However, the County reserves the right as deemed in its best interest to perform, or cause to be performed, the work and services, or any portion thereof, herein described in any manner it sees fit, including but not limited to: award of other contracts, use of any contractor, or perform the work with its own employees.

#### 1.10. LOCAL PREFERENCE

The evaluation of competitive bids is subject to Section 2-8.5 of the Miami-Dade County Code, which, except where contrary to federal and state law, or any other funding source requirements, provides that preference be given to local businesses.

##### A. A Local Business shall be defined as:

1. a business that has a valid Local Business Tax Receipt, issued by Miami-Dade County at least one year prior to bid or proposal submission, that is appropriate for the goods, services or construction to be purchased;
2. a business that has physical business address located within the limits of Miami-Dade County from which the vendor operates or performs business. Post Office Boxes are not verifiable and shall not be used for the purpose of establishing said physical address; and
3. a business that contributes to the economic development and well-being of Miami-Dade County in a verifiable and measurable way. This may include but not be limited to the retention and expansion of employment opportunities and the support and increase in the County's tax base. To satisfy this requirement, the vendor shall affirm in writing its compliance with either of the following objective criteria as of the bid or proposal submission date stated in the solicitation:
  - (a) vendor has at least ten (10) permanent full time employees, or part time employees equivalent to 10 FTE ("full-time equivalent" employees working 40 hours per week) that live in Miami-Dade County, or at least 25% of its employees that live in Miami-Dade County, or
  - (b) vendor contributes to the County's tax base by paying either real property taxes or tangible personal property taxes to Miami-Dade County, or
  - (c) some other verifiable and measurable contribution to the economic development and well-being of Miami-Dade County.

B. Additionally, a Locally-Headquartered Business shall mean a Local Business as defined above which has a "principal place of business" in Miami-Dade County. "Principal place of business" means the nerve center or the center of overall direction, control, and coordination of activities of the bidder. If the bidder has only one business location, such business location shall be its principal place of business.

- C. If the Low Bidder is a not a Local Business, then any and all responsive and responsible Local Businesses submitting a price within ten percent of the Low Bid, the Low Bidder, and any and all responsive and responsible Locally-Headquartered Businesses submitting a price within fifteen

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percent of the Low Bid, shall have an opportunity to submit a best and final bid equal to or lower than the Low Bid.

- D. If the Low Bidder is a Local Business which is not a Locally-Headquartered Business, then any and all responsive and responsible Locally Headquartered Businesses submitting a price within five percent of the Low Bid, and the Low Bidder shall have an opportunity to submit a best and final bid equal to or lower than the Low Bid.
- E. At this time, there is an interlocal agreement in effect between Miami-Dade and Broward Counties until September 2013, therefore, a vendor which meets the requirements of (1), (2) and (3) above for Broward County shall be considered a local business pursuant to this Section.

### 1.11. CONTINUATION OF WORK

Any work that commences prior to and will extend beyond the expiration date of the current contract period shall, unless terminated by mutual written agreement between the County and the successful Bidder, continue until completion at the same prices, terms and conditions.

### 1.12. BID PROTEST

A recommendation for contract award or rejection of award may be protested by a Bidder in accordance with the procedures contained in Sections 2-8.3 and 2-8.4 of the County Code, as amended, and as established in Administrative Order No.3-21.

### 1.13. LAWS AND REGULATIONS

The successful Bidder shall comply with all laws and regulations applicable to provide the goods and/or services specified in this Bid Solicitation. The Bidder shall comply with all federal, state and local laws that may affect the goods and/or services offered.

### 1.14. LICENSES, PERMITS AND FEES

The awarded bidder(s) shall hold all licenses and/or certifications, obtain and pay for all permits and/or inspections, and comply with all laws, ordinances, regulations and building code requirements applicable to the work required herein. Damages, penalties, and/or fines imposed on the County or an awarded bidder for failure to obtain and maintain required licenses, certifications, permits and/or inspections shall be borne by said awarded bidder.

### 1.15. SUBCONTRACTING

Unless otherwise specified in this Bid Solicitation, the successful Bidder shall not subcontract any portion of the work without the prior written consent of the County. The ability to subcontract may be further limited by the Special Conditions. Subcontracting without the prior consent of the County may result in termination of the contract for default. When Subcontracting is allowed the Bidder shall comply with County Resolution No. 1634-93, Section 10-34 of the County Code and County Ordinance No. 97-35.

### 1.16. SUBCONTRACTORS – RACE, GENDER AND ETHNIC MAKEUP OF OWNERS AND EMPLOYEES

Pursuant to Sections 2-8.1, 2-8.8 and 10.34 of the County Code (as amended by Ordinance No. 11-90), for all contracts which involve the expenditure of one hundred thousand dollars (\$100,000) or more, the entity contracting with the County must report to the County the race, gender, and ethnic origin of the owners and employees of its first tier subcontractors (refer to the Subcontractor/Supplier Listing Sub 100 form). In the event that the successful Bidder demonstrates to the County prior to award that this information is not reasonably available at that time, the successful Bidder shall be obligated by contract to exercise diligent efforts to obtain that information and to provide the same to the County not later than ten (10) days after it becomes available and, in any event, prior to final payment under the contract. As a condition of final payment under a contract, the successful Bidder shall identify subcontractors used in the work, the amount of each subcontract, and the amount paid and to be paid to each subcontractor (refer to the Subcontractor Payment Report Sub 200 form at <http://www.miamidade.gov/business/library/forms/subcontractors-payment.pdf>).

### 1.17. ASSIGNMENT

The successful Bidder shall not assign, transfer, hypothecate, or otherwise dispose of this contract, including any rights, title or interest therein, or its power to execute such contract to any person, company or corporation without the prior written consent of the County.

### 1.18. DELIVERY

Unless otherwise specified in the Bid Solicitation, prices quoted shall be F.O.B. Destination. Freight shall be included in the proposed price.

### 1.19. RESPONSIBILITY AS EMPLOYER

The employee(s) of the successful Bidder shall be considered to be at all times its employee(s), and not an employee(s) or agent(s) of the County or any of its departments. The successful Bidder shall provide competent and physically employee(s) capable of performing the work as required. The County may require the successful Bidder to remove any employee it deems unacceptable. All employees of the successful Bidder shall wear proper identification.

### 1.20. INDEMNIFICATION

The successful Bidder shall indemnify and hold harmless the County and its officers, employees, agents and instrumentalities from any and all liability, losses or damages, including attorney's fees and costs of defense, which the County or its officers, employees, agents or instrumentalities may incur as a result of claims, demands, suits, causes of actions or proceedings of any kind or nature arising out of, relating to or resulting from the performance of the agreement by the successful Bidder or its employees, agents, servants, partners, principals or subcontractors. The successful Bidder shall pay all claims and losses in connection therewith, and shall investigate and defend all claims, suits or actions of any kind or nature in the name of the County, where applicable, including appellate proceedings, and shall pay all costs, judgments, and attorney's fees which may be incurred thereon. The successful Bidder expressly understands and agrees that any insurance protection required by this Agreement or otherwise provided by the successful Bidder shall in no way limit the responsibility to indemnify, keep and save harmless and defend the County or its officers, employees, agents and instrumentalities as herein provided.

### 1.21. COLLUSION

A contractor recommended for award as the result of a competitive solicitation for any County purchases of supplies, materials and services (including professional services, other than professional architectural, engineering and other services subject to Sec. 2-10.4 and Sec. 287.055 Fla Stats.), purchase, lease, permit, concession or management agreement shall, within five (5) business days of the filing of such recommendation, submit an affidavit under the penalty of perjury, on a form provided by the County: stating either that the contractor is not related to any of the other parties bidding in the competitive solicitation or identifying all related parties, as defined in this Section, which bid in the solicitation; and attesting that the contractor's proposal is genuine and not sham or collusive or made in the interest or on behalf of any person not therein named, and that the contractor has not, directly or indirectly, induced or solicited any other proposer to put in a sham proposal, or any other person, firm, or corporation to refrain from proposing, and that the proposer has not in any manner sought by collusion to secure to the proposer an advantage over any other proposer. In the event a recommended contractor identifies related parties in the competitive solicitation its bid shall be presumed to be collusive and the recommended contractor shall be ineligible for award unless that presumption is rebutted in accordance with the provisions of Sec. 2-8.1.1. Any person or entity that fails to submit the required affidavit shall be ineligible for contract award.

- A. The Collusion Affidavit will be included in all solicitations and will be requested from bidders/proposers once bids/proposals are received and evaluated.
- B. Failure to provide a Collusion Affidavit within 5 business days after the recommendation to award has been filed with the Clerk of the Board shall be cause for the contractor to forfeit their bid bond.

### 1.22. MODIFICATION OF CONTRACT

The contract may be modified by mutual consent, in writing through the issuance of a modification to the contract, purchase order, change



## SECTION 1

### GENERAL TERMS AND CONDITIONS

order or award sheet, as appropriate.

#### 1.23. TERMINATION FOR CONVENIENCE

The County, at its sole discretion, reserves the right to terminate this contract without cause upon thirty (30) days written notice. Upon receipt of such notice, the successful Bidder shall not incur any additional costs under this contract. The County shall be liable only for reasonable costs incurred by the successful Bidder prior to notice of termination. The County shall be the sole judge of "reasonable costs."

#### 1.24. TERMINATION FOR DEFAULT

The County reserves the right to terminate this contract, in part or in whole, or place the vendor on probation in the event the successful Bidder fails to perform in accordance with the terms and conditions stated herein. The County further reserves the right to suspend or debar the successful Bidder in accordance with the appropriate County ordinances, resolutions and/or administrative/implementing orders. The vendor will be notified by letter of the County's intent to terminate. In the event of termination for default, the County may procure the required goods and/or services from any source and use any method deemed in its best interest. All re-procurement cost shall be borne by the successful Bidder.

#### 1.25. FRAUD AND MISREPRESENTATION

Pursuant to Section 2-8.4.1 of the Miami-Dade County Code, any individual, corporation or other entity that attempts to meet its contractual obligations with the County through fraud, misrepresentation or material misstatement, may be debarred for up to five (5) years. The County as a further sanction may terminate or cancel any other contracts with such individual, corporation or entity. Such individual or entity shall be responsible for all direct or indirect costs associated with termination or cancellation, including attorney's fees.

#### 1.26. ACCESS TO RECORDS

The County reserves the right to require the Contractor to submit to an audit by Audit and Management Services, the Commission Auditor, or other auditor of the County's choosing at the Contractor's expense. The Contractor shall provide access to all of its records, which relate directly or indirectly to this Agreement at its place of business during regular business hours. The Contractor shall retain all records pertaining to this Agreement and upon request make them available to the County for three years following expiration of the Agreement. The Contractor agrees to provide such assistance as may be necessary to facilitate the review or audit by the County to ensure compliance with applicable accounting and financial standards.

#### 1.27. OFFICE OF THE INSPECTOR GENERAL

Miami-Dade County has established the Office of the Inspector General, which is authorized and empowered to review past, present, and proposed County and Public Health Trust programs, contracts, transactions, accounts, records and programs. The Inspector General (IG) has the power to subpoena witnesses, administer oaths, require the production of records and monitor existing projects and programs. The Inspector General may, on a random basis, perform audits on all County contracts. The cost of random audits shall be incorporated into the contract price of all contracts and shall be one quarter (1/4) of one (1) percent of the contract price, except as otherwise provided in Section 2-1076 of the County Code.

#### 1.28. PRE-AWARD INSPECTION

The County may conduct a pre-award inspection of the bidder's site or hold a pre-award qualification hearing to determine if the bidder is capable of performing the requirements of this bid solicitation.

#### 1.29. PROPRIETARY/CONFIDENTIAL INFORMATION

Proposers are hereby notified that all information submitted as part of, or in support of bid submittals will be available for public inspection after opening of bids in compliance with Chapter 119 of the Florida Statutes; popularly known as the "Public Record Law." The proposer shall not submit any information in response to this solicitation, which the proposer considers to be a trade secret, proprietary or confidential. The submission of any information to the County in connection with this solicitation shall be deemed conclusively to be a waiver of any trade secret or other protection, which would otherwise be available to the proposer. In the event that the proposer submits information to the County in violation of this restriction, either inadvertently or intentionally

and clearly identifies that information in the bid as protected or confidential, the County may, in its sole discretion, either (a) communicate with the Proposer in writing in an effort to obtain the Proposer's withdrawal of the confidentiality restriction or (b) endeavor to redact and return that information to the Proposer as quickly as possible, and if appropriate, evaluate the balance of the proposal. The redaction or return of information pursuant to this clause may render a proposal non-responsive.

#### 1.30. HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT (HIPAA)

Any person or entity that performs or assists Miami-Dade County with a function or activity involving the use or disclosure of "individually identifiable health information (IIHI) and/or Protected Health Information (PHI) shall comply with the Health Insurance Portability and Accountability Act (HIPAA) of 1996 and the Miami-Dade County Privacy Standards Administrative Order. HIPAA mandates for privacy, security and electronic transfer standards that include but are not limited to:

1. Use of information only for performing services required by the contract or as required by law;
2. Use of appropriate safeguards to prevent non-permitted disclosures;
3. Reporting to Miami-Dade County of any non-permitted use or disclosure;
4. Assurances that any agents and subcontractors agree to the same restrictions and conditions that apply to the Bidder/Proposer and reasonable assurances that IIHI/PHI will be held confidential;
5. Making Protected Health Information (PHI) available to the customer;
6. Making PHI available to the customer for review and amendment; and incorporating any amendments requested by the customer;
7. Making PHI available to Miami-Dade County for an accounting of disclosures; and
8. Making internal practices, books and records related to PHI available to Miami-Dade County for compliance audits.

PHI shall maintain its protected status regardless of the form and method of transmission (paper records, and/or electronic transfer of data). The Bidder/ Proposer must give its customers written notice of its privacy information practices including specifically, a description of the types of uses and disclosures that would be made with protected health information.

#### 1.31. CHARTER COUNTY TRANSIT SYSTEM SALE SURTAX

When proceeds from the Charter County Transit System Sales Surtax levied pursuant to Section 29.121 of the Code of Miami-Dade County are used to pay for all or some part of the cost of this contract, no award for those portions of a Blanket Purchase Order (BPO) utilizing Charter County Transit System Sales Surtax funds as part of a multi-department contract, nor a contract utilizing Charter County Transit System Surtax funds shall be effective and thereby give rise to a contractual relationship with the County for purchases unless and until both the following have occurred: 1) the County Commission awards the contract, and such award becomes final (either by expiration of 10 days after such award without veto by the Mayor, or by Commission override of a veto); and, 2) either, i) the Citizens' Independent Transportation Trust (CITT) has approved inclusion of the Surtax funding on the contract, or, ii) in response to the CITT's disapproval, the County Commission reaffirms award of the contract by two-thirds (2/3) vote of the Commission's membership and such reaffirmation becomes final. Notwithstanding the other provisions of Section 1.30, award of an allocation for services in support of the CITT's oversight which does not exceed \$1000 will not require Commission or CITT approval and may be awarded by the Executive Director of the OCITT.

#### 1.32. LOBBYIST CONTINGENCY FEES

A) In accordance with Section 2-11.1(s) of the Code of Miami-Dade County, after May, 16, 2003, no person may, in whole or in part, pay, give or agree to pay or give a contingency fee to another person. No person may, in whole or in part, receive or agree to receive a contingency fee.

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B) A contingency fee is a fee, bonus, commission or non-monetary benefit as compensation which is dependant on or in any way contingent upon the passage, defeat, or modification of: 1) any ordinance, resolution, action or decision of the County Commission; 2) any action, decision or recommendation of the County Mayor or any County board or committee; or 3) any action, decision or recommendation of any County personnel during the time period of the entire decision-making process regarding such action, decision or recommendation which foreseeably will be heard or reviewed by the County Commission or a County board or committee.

**1.33. COMMISSION AUDITOR – ACCESS TO RECORDS**

Pursuant to Ordinance No. 03-2, all vendors receiving an award of the contract resulting from this solicitation will grant access to the Commission Auditor to all financial and performance related records, property, and equipment purchased in whole or in part with government funds.

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**SPECIAL CONDITIONS**

**2.1 PURPOSE**

The purpose of this solicitation is to prequalify products and bidders for future pricing competition for the purchase of pipe and fittings for water and wastewater service. This initial solicitation provides for the submission of documents and forms intended to verify that bidders meet or exceed the minimum requirements, and that the offered products meet the technical specifications, set forth throughout this solicitation. Bidders who meet or exceed the requirements established in this solicitation may be placed on a prequalification of bidders list that will be accessed by the Water and Sewer Department to obtain quotes for the purchase of the prequalified products.

**2.2 CONTRACT MEASURES AND PREFERENCES****2.2.1 Small Business Contract Measures (Bid Preference)**

A Small Business Enterprise (SBE) bid preference applies to this solicitation. For awards valued up to and including \$100,000, a 10% (ten percent) bid preference shall apply for certified Micro Business Enterprise (Micro) bidders. For awards valued over \$100,000 and up to \$1,000,000, a 10% (ten percent) bid preference shall apply for certified Micro and SBE bidders. For awards valued over \$1,000,000, a 5% (five percent) bid preference shall apply for certified Micro and SBE bidders. Micro Business Enterprises and Small Business Enterprises must be certified by Small Business Development under Business Affairs, a division of the Department of Regulatory and Economic Resources (RER) for the type of goods and/or services the enterprise provides in accordance with the applicable commodity code(s) for this solicitation. A Micro Business Enterprise is a certified SBE firm whose three year average gross revenues does not exceed \$2 million, or is a manufacturer with fifty (50) employees or less, or is a wholesaler with fifteen (15) employees or less. For certification information, contact RER at 305-375-CERT (2378) or at <http://www.miamidade.gov/business/business-certification-programs.asp>. The enterprises must be certified by bid submission deadline, at contract award, and for the duration of the contract to remain eligible for the preference.

**2.2.2 Local Certified Service - Disabled Veteran's Business Preference**

In accordance with Section 2-8.5.1 of the Miami-Dade County Code, a Local Certified Service-Disabled Veteran Business Enterprise (VBE) that submits a bid for a contract shall receive a bid preference of five percent of the price bid. A VBE is a firm that is a) a local business pursuant to Section 2.8.5 of the Code of Miami-Dade County and b) prior to proposal submittal is certified by the State of Florida Department of Management Services as a service-disabled veteran business enterprise pursuant to Section 295.187 of the Florida Statutes. This preference will only be used for evaluating and awarding the bids and shall not affect the contract price. In procurements where Small Business Enterprises (SBE) measures are being applied, a VBE who is also an SBE shall not receive the veteran's preference provided in this section and shall be limited to any applicable SBE preferences. At the time of bid or proposal submission, the bidder must affirm in writing its compliance with the certification requirements of Section 295.187 of the Florida Statutes and submit this affirmation and a copy of the actual certification along with

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the bid or proposal submission.

2.2.3 Local Preference

See Section 1, General Terms and Conditions, Paragraph 1.10.

**2.3 PRE-INVITATION TO QUOTE CONFERENCES**

A pre-request for quote conference will apply if so defined in the request for quote.

**2.4 TERM OF CONTRACT: TEN (10) YEARS**

This contract shall commence on the first calendar day of the month succeeding approval of the contract by the Board of County Commissioners, or designee, unless otherwise stipulated through written notice by the County's Internal Services Department Procurement Management Division, and contingent upon the completion and submittal of all required bid documents. The contract shall expire on the last day of the last month of the ten (10) year contract term.

**2.5 OPTION TO RENEW**

Intentionally Omitted

**2.6 METHOD OF AWARD: PREQUALIFICATION**

2.6.1 Method of Award Summary

Responsive and responsible bidders that meet the minimum requirements set forth in this solicitation will be prequalified to participate in future competitions for the purchase of prequalified products (products that are accepted by the County in accordance with Section 3 Technical Specifications).

2.6.2 Minimum Requirements - In addition to other requirements listed throughout this solicitation, bidders shall meet the following requirements to be considered a prequalified bidder:

2.6.2.1 Maintain an office equipped with modern office equipment, especially a facsimile (FAX) machine or an e-mail address. Either resource must be available twenty-four (24) hours a day to provide immediate support and expedite quotes and deliveries. The bidder's office address, and fax number and/or e-mail address shall be included in their submittal.

2.6.2.2 Be authorized by the manufacturer, or their designee, as an agent, dealer, distributor, or equivalent, for the products proposed to the County. Bidders are required to submit proof of the manufacturer's authorization. The proof may be in the form of any of the following:

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2.6.2.2.1 Current correspondence from the manufacturer designating the bidder as an agent, dealer, distributor, or equivalent.

or:

2.6.2.2.2 A copy of an executed agreement between the manufacturer and the bidder, designating the bidder as an agent, dealer, distributor, or equivalent.

or:

2.6.2.2.3 The web address of the page in the manufacturer's internet website, where the manufacturer clearly lists the bidder as an agent, dealer, distributor, or equivalent.

2.6.2.3 Have at least one product accepted by the County under this solicitation. A product must meet the solicitation's technical specifications, as described in Section 3, to be accepted and prequalified under this solicitation. Bidders will identify their proposed products by entering the product description as requested in Section 4 Bid Submittal Form. Bidders may propose any product, or group of products, specified in Section 3 Technical Specifications.

2.6.2.3.1 Evaluation Data

The Bid Submittal should be accompanied by two (2) complete sets of Evaluation Data, as defined in Section 3 Technical Specifications, for each product, or group of products, proposed by the bidder. All supporting documentation submitted by the bidder must, in total, meet the specifications set forth in this solicitation.

2.6.2.3.2 Equal Product

The manufacturer's names or brand names in this solicitation are being used for the sole purpose of establishing the minimum requirement of level of quality, standard of performance, and design and is in no way intended to prohibit the offer of other manufacturer's items of equal material. An "equal" product shall be equal in quality and standards of performance to the product specified in the solicitation. The County shall be sole judge of equality, based on its best interest, and its decision in this regard shall be final.

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2.6.2.3.3 Samples May Be Required During Evaluation

During evaluation, a bidder may be required to submit a sample of a proposed product for evaluation by, and at no cost to the County. If a sample is required, the County will notify the bidder of such in writing and will specify the deadline for its submission. Each sample submitted by the bidder shall be clearly labeled with the bidder's name, bid number, bid title, manufacturer's name, and brand name. If a bidder fails to submit a required sample, properly labeled, within the specified date stipulated in the notice, the County may not consider the proposed product. All samples shall become the property of Miami-Dade County. The County may perform its own testing or may ask the bidder to send samples to a certified laboratory, independent of the bidder, for analysis. Any costs for testing performed, during the evaluation period, shall be paid by bidder. On the basis of this testing and analysis, the County shall be sole judge of the acceptability of the sample in conformance with the bid specifications and its decision shall be final. Any sample submitted shall create an express warranty that the whole of the goods and/or services to be provided by the bidder during the contract period shall conform to the sample submitted. The bidder shall be required to provide adequate restitution to the County, in the manner prescribed by the County, if this warranty is violated during the term of the contract.

2.6.3 Total Number of Prequalified Bidders Shall be Determined by the County

The County will determine the total number of prequalified bidders under the contract. During the term of any contract resulting from this solicitation, the County may receive and evaluate submittals, and add prequalified bidders and products. If the County adds bidders, the bidders must meet the same requirements established for the original competition.

2.6.4 Additional Products May Be Added

During the term of any contract resulting from this solicitation, the County may add products to the contract. The County will add products to the contract by publishing their Technical Specifications, and prequalified bidders may propose products in accordance with Paragraphs 2.6.2.2 and 2.6.2.3.

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2.6.5 Proof of Compliance to the Solicitation's Requirements

Bidders are required to submit, with their bid submittal form, all the specified information, documents and attachments as proof of compliance to the solicitation's requirements. Miami-Dade County may allow bidders to complete, or supplement, their proof of compliance to the solicitation's requirements but failure to provide proof of compliance to the solicitation's requirements, as requested by the County, may result in the bid, or product submission, being declared incomplete and not evaluated until such time as all documentation is received by the County.

2.6.6 Verification of Information

The County may verify the information submitted by the bidders and may obtain and evaluate additional information, as it deems necessary to ascertain the bidders' ability to perform under the contract and a product's compliance to the technical specifications. The County shall be sole judge of a bidder's ability to perform and a product's compliance, and its decision shall be final.

**2.7 PRICES**

Intentionally Omitted.

**2.8 EXAMINATION OF COUNTY FACILITIES AND INSPECTION OF COUNTY EQUIPMENT**

Intentionally Omitted

**2.9 EQUAL PRODUCT**

See Paragraph 2.6.2.3.2

**2.10 LIQUIDATED DAMAGES**

Liquidated damages will apply if so defined in the request for quote.

**2.11 INDEMNIFICATION AND INSURANCE**

Intentionally Omitted

**2.12 BID GUARANTY**

Intentionally Omitted

**2.13 PERFORMANCE BOND**

Intentionally Omitted

**2.14 CERTIFICATIONS AND PERMITS**

Intentionally Omitted

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**2.15 METHOD OF PAYMENT**

2.15.1 The bidder must submit an original invoice to the Water and Sewer Department, Attention: Accounts Payable Unit, Post Office Box 330316, Miami, Florida 33233-0316.

2.15.2 All invoices must reference the corresponding packing slip/delivery ticket number that was signed by an authorized representative of the Water and Sewer Department at the time the item was delivered and accepted by the delivery site. If an item is delivered by the US Mail or a private carrier e.g. US Postal Service, Federal Express, Carolina Freight, etc., the carrier's corresponding receipt ticket/mailling ticket/bill of lading number must be referenced on the invoice. The Water and Sewer Department also requires all invoices to reference specific data from the corresponding Water and Sewer Department Requisition Form which is sent to the bidders to confirm an order i.e. purchase order/small purchase number, requisition number, quantity, unit cost, and total cost.

2.15.3 Submittal of invoices shall not exceed thirty (30) calendar days from the delivery of the items. Under no circumstances shall the invoices be submitted to the Accounts Payable Unit in advance of the delivery and acceptance of the item.

2.15.4 In addition to and including the above requirements, all invoices shall contain the following information:

2.15.4.1 Bidder Information

- The name of the business organization as specified on the contract between Miami-Dade County and bidder
- Date of invoice
- Invoice number
- Bidder's Federal Identification Number on file with Miami-Dade County

2.15.4.2 County Information

- Miami-Dade County Release Purchase Order Number

2.15.4.3 Pricing Information

- Unit price of the goods, services or property provided
- Extended total price of the goods, services or property
- Applicable discounts



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2.15.4.4 Goods or Services Provided per Contract

- Description
- Quantity
- Certifications, test reports, and notarized statements, as required in Section 3 Technical Specifications

2.15.4.5 Delivery Information

- Delivery terms set forth within the Miami-Dade County Release Purchase Order
- Location and date of delivery of goods, services or property

2.15.5 Failure to Comply

Failure to submit invoices in the prescribed manner will delay payment.

**2.16 SHIPPING TERMS AND PRODUCT ACCEPTANCE**

2.16.1 F.O.B. Destination

Bidders shall quote prices based on F.O.B. Destination and shall hold title to the goods until such time as they are delivered to, and accepted by, an authorized County representative.

2.16.2 Acceptance of Product by the County

The products to be purchased through any contract resulting from this solicitation shall be delivered to the County in excellent condition, and shall be in full compliance with the specifications and requirements set forth in this solicitation and subsequent requests for quote. If a product does not meet specifications, it will be returned to the bidder as exchange for suitable merchandise or for full credit at no additional cost to the County. The bidder shall be responsible for arranging all shipping, or pick-up, and bear all costs associated with the return of products that are deemed unacceptable by the County. Product acceptance by the County will take place after the bidder executes the delivery of the product, and the County performs the product's inspection and installation. In the event the bidder fails to pick-up products that are deemed unacceptable by the County, or fails to arrange to have such material shipped back to the bidder within a reasonable period of time, the County shall cause such material to be shipped to the bidder, and the bidder shall be liable for any cost of shipping incurred by the County.

2.16.3 Damaged Goods When Shipping Will Be Provided by Bidder

The bidder shall be responsible for filing, processing, and collecting all damage

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claims against the shipper.

**2.17 DELIVERIES**

Bidders shall make deliveries as prescribed in the request for quote.

**2.18 BACK ORDER ALLOWANCE**

Intentionally Omitted

**2.19 WARRANTY**

**2.19.1 Materials Shall Be New and Warranted Against Defects**

The bidder hereby acknowledges and agrees that all materials, except where recycled content is specifically requested, supplied by the bidder in conjunction with this solicitation and resultant contract shall be new, warranted for their merchantability, and fit for a particular purpose. In the event any of the materials supplied to the County by the bidder are found to be defective or do not conform to specifications: (1) the materials may be returned to the bidder at the bidder's expense and the purchase order cancelled or (2) the County may require the bidder to replace the materials at the bidder's expense.

**2.19.2 Type of Warranty Coverage Required**

In addition to all other warranties that may be supplied by the manufacturer, the bidder shall warrant its products against faulty labor and/or defective material, for no less than one (1) year after the date of acceptance of the product by the County. This warranty requirement shall remain in force for the full one (1) year period; regardless of whether the bidder is under contract with the County at the time of defect. Any payment by the County on behalf of the products received from the bidder does not constitute a waiver of these warranty provisions.

**2.19.3 Correcting Defects Covered Under Warranty**

The bidder shall be responsible for promptly correcting any deficiency, at no cost to the County, within thirty (30) calendar days after the County notifies the bidder of such deficiency. If the bidder fails to honor the warranty and/or fails to correct or replace the defective product within the thirty calendar days, the County may (a) place the bidder in default of its contract, and/or (b) procure the products or services from another bidder and charge the initial bidder for any additional costs that are incurred by the County, either through a credit memorandum or through invoicing.

**2.20 CONTACT PERSON**

For additional information regarding the terms and conditions of this solicitation, and resultant contract, contact Maggie Reynaldos, Procurement Officer, at (305) 375-4435 or at [mtc@miamidade.gov](mailto:mtc@miamidade.gov).

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**SPECIAL CONDITIONS**

**2.21 COUNTY USER ACCESS PROGRAM (UAP) FEE****2.21.1 User Access Fee**

2.21.1.1 Pursuant to Miami-Dade County Budget Ordinance No. 03-192, this contract is subject to a user access fee under the County User Access Program (UAP) in the amount of two percent (2%). All sales resulting from this contract, or any contract resulting from this solicitation and the utilization of the County contract price and the terms and conditions identified herein, are subject to the two percent (2%) UAP. This fee applies to all contract usage whether by County Departments or by any other governmental, quasi-governmental or not-for-profit entity.

2.21.1.2 The vendor providing goods or services under this contract shall invoice the contract price and shall accept as payment thereof the contract price less the 2% UAP as full and complete payment for the goods and/or services specified on the invoice. The County shall retain the 2% UAP for use by the County to help defray the cost of the procurement program. Vendor participation in this invoice reduction portion of the UAP is mandatory.

**2.21.2 Joint Purchase**

2.21.2.1 Only those entities that have been approved by the County for participation in the County's Joint Purchase and Entity Revenue Sharing Agreement are eligible to utilize or receive Miami-Dade County contract pricing and terms and conditions. The County will provide to approved entities a UAP Participant Validation Number. The vendor must obtain the participation number from the entity prior to filling any order placed pursuant to this section. Vendor participation in this joint purchase portion of the UAP, however, is voluntary. The vendor shall notify the ordering entity, in writing, within 3 work days of receipt of an order, of a decision to decline the order.

2.21.2.2 For all ordering entities located outside the geographical boundaries of Miami-Dade County, the successful vendor shall be entitled to ship goods on an "FOB Destination, Prepaid and Charged Back" basis. This allowance shall only be made when expressly authorized by a representative of the ordering entity prior to shipping the goods.

2.21.2.3 Miami-Dade County shall have no liability to the vendor for the cost of any purchase made by an ordering entity under the UAP and shall not be deemed to be a party thereto. All orders shall be placed directly by the ordering entity with the vendor and shall be paid by the ordering entity less the 2% UAP.

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2.21.3 Vendor Compliance

If a vendor fails to comply with this section, that vendor may be considered in default by Miami-Dade County in accordance with Section 1, Paragraph 1.23 of this solicitation.

**2.22 AVAILABILITY OF CONTRACT TO OTHER COUNTY DEPARTMENTS**

Although this solicitation is specific to the needs of the Water and Sewer Department, it is hereby agreed and understood that any County department or agency may avail itself of this contract and purchase any prequalified product, or ancillary item, from the prequalified bidders. The bidder will obtain the necessary delivery and invoicing information from the County department or agency.

**2.23 COMPLIANCE WITH FEDERAL STANDARDS**

All products to be purchased under this bid shall be in accordance with all governmental standards, to include, but not limited to, those issued by the American National Standards Institute (ANSI), the American Society for Testing Materials (ASTM), the Environmental Protection Agency (EPA), The Instrument Society of America (ISA), the International Standards Organization (ISO), the National Fire Protection Association (NFPA), the National Institute of Safety Hazards (NIOSH), the National Sanitation Foundation (NSF), and the Occupational Safety and Health Administration (OSHA).

It shall be the responsibility of all prequalified bidders to be regularly informed and to conform to any changes in standards issued by any regulatory agencies that govern the commodities during the term of any contract resulting from this solicitation.

**2.24 LEGAL REQUIREMENT FOR POLLUTION CONTROL**

It is the intent of these specifications to comply with the Miami-Dade County Pollution Control Ordinance as stated in Chapter 24 of the Miami-Dade Code. This ordinance is made a part of these specifications by reference and may be obtained, if necessary, by the bidder through the Department of Environmental Resources Management (DERM), 33 SW 2nd Ave., Miami, Florida 33130, Telephone (305) 372-6789.

**2.25 SECURITY REQUIREMENTS FOR THE WATER AND SEWER DEPARTMENT**

2.25.1 On April 23, 2002, the Miami-Dade Board of County Commissioners approved Ordinance Number 02-68 entitled "Provide Rules and Regulations Governing Security at the Water and Sewer Department Facilities" which created Article IX of Chapter 32 of the Miami-Dade County Code. In accordance with the Ordinance, the standard procedures for receiving cartons/boxes/packages, etc. are as follows:

2.25.1.1 Items Delivered By the Awarded Bidders

2.25.1.1.1 The bidder must enclose a complete packing slip or delivery ticket with any items to be delivered in conjunction with this contract. The packing slip must

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include, at a minimum, the following information: purchase order number; date of order; Department requisition number; a complete listing of the items being delivered; and, if authorized, the back-order quantities and the delivery date of the back-order.

2.25.1.1.2 Failure to prepare and enclose packing slips with the items in the prescribed manner may result in the shipment being refused and ordered off the property by the facility's security forces. The Water and Sewer Department shall not be responsible for delays, redelivery fees, restocking fees or any other additional cost incurred by noncompliance with these requirements.

2.25.1.2 Items Delivered to the Various Water and Sewer Department Store Rooms by the US Mail or a Private Carrier (i.e. US Postal Service, UPS, Federal Express, Carolina Freight)

2.25.1.2.1 The bidders must enclose a complete packing slip or delivery ticket with items to be delivered, in conjunction with this solicitation, for the bidder by a private carrier. The packing slip must be enclosed with the shipping cartons, which contain the items being delivered. The packing slip must include, at a minimum, the following information: purchase order number; date of order; Department requisition number; a complete listing of the items being delivered; and, if authorized, the back-order quantities and the delivery date of the back-order. In addition, the bidders must print the purchase order number and the Department requisition number in an obvious, prominent space in the "Ship To" portion of the private carriers receipt ticket/mailling ticket/bill of lading. This action will allow the storeroom personnel to immediately identify the items being delivered. If there is any question regarding the private carrier's receipt ticket, the bidder's packing slip enclosed with the items being delivered can be immediately examined.

2.25.1.2.2 Failure to include the purchase order number and the Department requisition number on the private carrier's receipt ticket and to enclose a packing slip to the items being delivered in the prescribed manner may result in the shipment being refused and ordered off the property by the facility's security forces. The Water and Sewer Department shall not be responsible for delays, redelivery fees, restocking fees or any other additional

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cost incurred by noncompliance with these requirements.

**2.26 PATENTS AND ROYALTIES**

2.26.1 The bidder, without exception, shall indemnify and save harmless the County and its employees from liability of any nature or kind, including cost and expenses for or as a result of any copyrighted, patented, or un-patented invention, process, or article manufactured by the bidder. The bidder has no liability when such claim is solely and exclusively due to the combination, operation or use of any article supplied hereunder with equipment or data not supplied by bidder or is based solely and exclusively upon the County's alteration of the article. The purchaser will provide prompt written notification of a claim of copyright or patent infringement.

2.26.2 Further, if such a claim is made or is pending, the bidder may, at its options and expenses, procure for the purchaser the right to continue use of, replace or modify the article to render it non-infringing. (If none of the alternatives are reasonably available, the County agrees to return the article on request to the bidder and receive reimbursement, if any, as may be determined by a court of competent jurisdiction). If the bidder uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood without exception that the bid prices shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in the work.

**2.27 CHANGES IN MANUFACTURER DESIGNATION DURING THE CONTRACT TERM**

Prequalified bidders will report to the County any changes in their authorization as manufacturer agents, dealers, distributors, or equivalent for the products in the contract. Should a bidder cease to be authorized by a manufacturer for a product in the contract, the product or service will be removed from the list of prequalified products available from the bidder. Should a bidder become authorized by a manufacturer during the contract term, the bidder may submit proof of their firm's authorization, in accordance with Paragraph 2.6.2.2, for the County's evaluation.

**2.28 DEMURRAGE CHARGES WILL NOT BE ALLOWED**

The County shall not incur separate demurrage charges from bidders who supply containers on an interim basis to the County in conjunction with this bid. Any rental or demurrage costs for such containers that are normally charged by the bidder must be reflected in the unit prices offered by the bidder.

**2.29 TESTING OF RANDOM SAMPLES**

Samples of delivered items may be randomly selected and tested for compliance with the solicitation's specifications. The Water and Sewer Department may periodically check products obtained through this solicitation for conformance to specifications, to include: materials testing, pressure testing, verifying dimensions, tolerances and component weights, markings, finish and fit, and such other matters as are necessary to assure that the products meet the specifications. If it is found that the delivered commodities do not conform to the

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specifications, the County shall require immediate replacement. The County may charge the bidder for the cost of testing or re-testing products that are found to be non-conforming to specifications.

**2.30 OMISSION FROM THE SPECIFICATIONS**

The apparent silence of this solicitation and any addendum regarding any details or the omission from the solicitation of a detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail, and that only materials and workmanship of the first quality are to be used. All interpretations of this solicitation shall be made upon the basis of this agreement.

**2.31 PURCHASE OF ANCILLARY ITEMS**

Ancillary items may be purchased from the prequalified bidders under this solicitation. Ancillary items include: gaskets, ties, connectors, bands, actuators, adapters, bearings, bolts, nuts, brackets, discs, valve fittings, hinges, keys, levers, rebuild/repair kits, and stuffing boxes. These ancillary items may be subject to technical evaluation but do not have to be listed as prequalified products to be quoted under the contract. The County may award the ancillary items to a prequalified bidder or acquire the items through a separate solicitation.

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**PIPE AND FITTINGS FOR WATER AND WASTEWATER SERVICE, PREQUALIFICATION OF  
PRODUCTS AND BIDDERS**

**3.1 SCOPE**

Prequalify pipe and fittings for water and wastewater service that conform to American National Standards Institute, American Society for Testing and Materials, and/or American Water Works Association standards, as modified in these Technical Specifications.

**3.2 DEFINITIONS**

3.2.1 "Approved Equal" shall be defined as having the same, or higher quality, standards of performance, design and requisites (no variances) as required for the requested product.

3.2.2 "AISI" denotes the American Iron and Steel Institute.

3.2.3 "ANSI" denotes the American National Standards Institute.

3.2.4 "AWWA" denotes the American Water Works Association.

3.2.5 "ASTM" denotes the American Society for Testing and Materials.

**3.3 TECHNICAL SPECIFICATIONS FOR VALVES**

3.3.1 "Evaluation Data" for Valves shall be as defined as consisting of all three of the following items of information (Excerpted from AWWA Standard for Reduced-Wall, Resilient-Seated Gate Valves for Water Supply Service (ANSI/AWWA C515-01), by permission. Copyright © 2001, American Water Works Association. Complete document available from AWWA at 800-926-7337 or [www.awwa.org](http://www.awwa.org)). The word "purchaser" shall be construed to mean the Water and Sewer Department in either direct purchase or an owner's representative situation. Butterfly valves require an operator and all of the data shall be supplied on the operator as well as the valve itself for this type of unit.

3.3.1.1 Catalogue Data - The manufacturer shall supply catalogue data, including illustrations and a parts list that identifies the materials used for various parts. The information shall be in sufficient detail to serve as a guide in the assembly and disassembly of the valve and for ordering repair parts.

3.3.1.2 Weight information - The manufacturer shall provide a statement of the net assembled weight for each size of valve exclusive of joint accessories.

3.3.1.3 Assembly Drawings - The manufacturer or bidder shall submit to the purchaser one set of drawings showing the principal dimensions, construction details, and materials used for all parts of the valve. All work shall be done and all valves shall be provided in accordance with these drawings after the drawings have been reviewed and accepted by the purchaser.



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3.3.2 General Requirements for all Valves

- 3.3.2.1 Bidders are advised to carefully read the specification requirements contained in this solicitation, and coordinate with manufacturers to propose products that fully conform to these specifications.
- 3.3.2.2 All valves shall conform to ANSI/NSF Standard 61, "Drinking Water System Components-Health Effects".
- 3.3.2.3 Grades B and C bronze, as listed in Table 1 of AWWA C500-93, or brass, shall not be used in the fabrication of any of the valve types listed in these specifications. Aluminum bronze, if used, shall not dealuminize, and the method of preventing this shall be fully described in the bidder's submittal.

3.3.3 Non-Conformance with Specifications

- 3.3.3.1 Should a product's submitted evaluation data show that the item does not conform with the specifications, the non-conformance will be classified by the Water and Sewer Department in one of two category levels: Basic Design Non-Conformance and Correctable Non-Conformance.
- 3.3.3.2 Two examples of Basic Design Non-Conformance are: 80 % port rather than the 100 % port specified for a particular plug valve and, bolting through the rubber seat of a butterfly valve. The deficiencies in both of these examples are non-correctable in that, without major redesign of the valve, neither the bidder nor the manufacturer can supply a valve that meets the established requirements.
- 3.3.3.3 If Basic Design Non-Conformance is discovered during the evaluation process the product will be rejected.
- 3.3.3.4 The second category level of non-conformance will be termed Correctable Non-Conformance. Common instances of Correctable Non-Conformance include the use of materials or alloys in the various parts of a valve which do not conform with the specification requirements. Two examples of Correctable Non-Conformance are: plain carbon steel exterior bolting instead of the specified hot-dip galvanized or stainless steel and, the use of Type 304 stainless steel where Type 316 is required by the specifications to provide increased corrosion resistance. Most manufacturers show only the standard and least expensive materials in their standard catalogue diagrams but have the capability to supply other more durable materials when required by the end user. In many instances only the standard catalogue diagrams are submitted without correction with the bidder's submittals, and are therefore rejected for non-conformance. To correct this situation, with its inherent delays and subsequent rejections, the Water and Sewer Department will use "approved as noted" procedures to technically evaluate these submittals. If

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Correctable Non-Conformance is found during evaluation, the bidder-supplied information and/or specification sheets will be marked to show the necessary corrections to conform with the specified requirements. These corrected materials (evaluation data) will be returned marked "Approved as Noted" and will be returned to the bidder. These corrections will be binding, and products supplied by the bidder shall in every way conform to the County's specifications, particularly as indicated on the "Approved as Noted" submittal information. The Internal Services Department Procurement Management Division will forward the corrected materials (evaluation data) to the bidder. The bidder must acknowledge compliance to the "Approved as Noted" materials and return them to the Department of Internal Services Procurement Management Division, within a specified time period. Bidders are advised that no additional delivery time, compensation or revisions to bidder-proposed pricing will be allowed as a result of bidder's compliance with the specified requirements. The Water and Sewer Department Chief, Engineering Division, or his designee, shall be the sole judge of whether a product conforms to the technical specifications in this solicitation.

**3.3.4 Butterfly Valves**

- 3.3.4.1 Butterfly valves shall be manufactured in accordance with the applicable provisions of ANSI/AWWA Standard C504-06, "Rubber-Seated Butterfly Valves", as modified herein. Valves shall be designed for installation in a horizontal line with shafts horizontal and operator input shaft vertical. Thus, hydrostatic torque must be considered in operator sizing. In the closed position, the valve disc will be in an approximately vertical plane. This shall be taken into account by the design of the valves. The shaft, disc, rubber seal and bearings shall be designed and manufactured such that no excess or insufficient clearances are developed at the top, bottom, or sides of the seating areas. The valves will be installed under buried and submerged conditions. Valves shall be pressure-tight in either direction. All valve components shall be designed for all of these specified conditions as a minimum. Valves 72-inch and smaller shall be AWWA Class 150B.
- 3.3.4.2 Valve Bodies shall be made of cast or ductile iron shall conform to ASTM Standard A126-04, "Gray Iron Castings for Valves, Flanges and Pipe Fittings", Class B, or ASTM A48-03R08, "Gray Iron Castings", Class 40. Ductile iron shall conform to ASTM A395-99R09 grade 60-40-18, or ASTM A536-84R09, Grade 65-45-12, 70-50-05 or 80-55-06. Valve body gaskets shall be rubber or rubber composition. Inorganic mineral fiber or paper, are not acceptable. Rubber and rubber composition materials shall be suitable for use in water containing chlorine or chloramines. No disc stops shall be allowed on the body.
- 3.3.4.3 Mechanical Joint Valves shall have ends complying with ANSI/AWWA Standard C111/A21.11-07, "Rubber-Gasket Joints for Ductile-Iron

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Pressure Pipe and Fittings". Mechanical joint gaskets, glands, tee-head bolts hex and nuts shall be included with the valve. Follower glands held in place with set screws will not be accepted. Bolt holes in the flanges of the mechanical joints shall be equally spaced and shall straddle the vertical centerline. Gaskets shall be shipped separately in suitable protective containers.

- 3.3.4.4 Flanged Valves shall have ends faced and drilled in conformance with ANSI Standard B16.1, "Cast Iron Pipe Flanges and Flanged Fittings", Class 125. Hollow back flanges are not acceptable. Bolt holes shall not be tapped, except as may be required by the shaft hubs. Flanged valves shall have short bodies with laying lengths as specified in Table 1 of ANSI/AWWA Standard C504-06. Since this standard does not address sizes over 72-inch, laying lengths for valves above 72-inches shall be submitted by the bidder with his submittal. Bolt holes in the flanges shall be equally spaced and shall straddle the vertical and horizontal centerlines. Others will furnish all joint materials for flanged valves.
- 3.3.4.5 Valve Shafts shall be one piece straight through, or two-piece stub-type, American Iron and Steel Institute (AISI) Type 316 stainless steel or Monel construction for valves 72-inch and smaller. The valve shafts for 84-inch and larger, if ordered, shall be AISI Type 316 stainless steel or stainless steel bar conforming with ASTM A564/A564M-04R09, "Hot-Rolled and Cold-Finished Age-Hardening Stainless and Heat-Resisting Bars and Shapes", Type 630, condition H1100 construction. The shaft diameter and torque capabilities for 84-inch valves and larger shall be determined in accordance with AWWA Manual of Water Supply Practices, M49, "Butterfly Valves, Torque, Head Loss, and Cavitation Analysis", but shall not be less than the 8½-inch value given in ANSI/AWWA Standard C504-06, Table 3, for 72-inch, Class 150B, valves. Shaft design and sizing shall preclude any disc edge-to seal excess or insufficient clearance due to "sag", "play" or "tolerance add up" in the disc-shaft assembly. All nuts, bolts, pins or other items within the valve or in contact with water shall be of AISI Type 316 stainless steel, or approved equal.
- 3.3.4.6 Pins connecting the disc and the shaft of all valves shall be mechanically secured. All valves with one-piece through shafts shall have at least two pins. Valves 24-inch and smaller with two-piece stub type shafts shall have one or two pins in the primary or operating shaft, and at least one pin in the secondary shaft. Valves 30-inch and larger with two-piece stub type shafts shall have at least two pins in the primary or operating shaft and at least one pin in the secondary shaft. Each pin on the primary or operating shaft shall be sized to take full design load imposed on the disc. Pins shall be either force fit or mechanically locked. Mechanical locking shall be by lock washers, lock nuts, force fit or other sturdy and corrosion resistant means. Roll pins will not be accepted. Riveted or welded type pins will not be accepted.

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- 3.3.4.7 Valve Discs shall seat at an angle of 90 degrees to the pipe axis. Valve discs shall be made of cast iron (conforming to ASTM Standard A48-03R08, Class 40, "Gray Iron Castings"; ASTM Standard A126-04, "Gray Iron Castings for Valves, Flanges and Pipe Fittings", Class B; or ASTM Standard A536-84R09, "Ductile Iron Castings", Grade 65-45-12; of cast steel conforming to ASTM Standard A216-08, "Steel Castings, Carbon Suitable for Fusion Welding for High-Temperature Service", Grade WCB, or of alloy cast iron conforming to ASTM Standard A436-84R06, "Austenitic Gray Iron Castings", Type 1 or 2; or ASTM Standard A439-83R09, "Austenitic Ductile Iron Castings", Type D2, and with a maximum lead content of 0.003 percent. The Seating edge of the disc for its full width shall be AISI Type 316 stainless steel, Monel metal, or nickel-chrome (18-20) applied by the plasma arc-weld process. Valves with angle seating or fabricated steel discs are not acceptable. Sprayed metal seating edges are not acceptable. Welded seating edges shall be at least 3/32-inch thick.
- 3.3.4.8 Valve Seats shall be secured to the valve body only. Seats secured to the valve discs will not be accepted. Valve seats shall be made of new synthetic rubber and may be reinforced by the manufacturer. Rubber seats on valves 24-inch and smaller shall be secured to the valve bodies by vulcanizing, or by cementing and clamping. On valves 30-inch and larger, the seat shall be mechanically held by means of grooves machined or cast in the valve body, and shall be designed in such a way as to hold the seats from popping out when secured, or when subjected to compression. The seats shall be fully adjustable and replaceable with the valve installed. All parts of clamps and fastening devices shall be made of AISI Type 316 stainless steel or other approved equal non-corrodible material. Bolts may be used to hold rubber-seat clamps in place, but the bolts shall not go through the rubber seat itself. Durometer hardness, reinforcement, dimensions and section of the rubber seat shall be selected and matched to the valve size and clearances such that adequate seal contact pressure is generated without excessive amounts of seal material being extruded into the annulus between the disc edge and body. In addition to meeting the above conditions, bidders may be required to present conclusive evidence proving that seats of the proposed design are being successfully used in similar 30-inch and larger butterfly valves furnished by the same manufacturer. Sprayed or plated mating seat surfaces will not be accepted.
- 3.3.4.9 Valve bearings shall be self-lubricating, corrosion resistant, sleeve type, and with thrust bearings as required by Section 4.3.6 of ANSI/AWWA Standard C504-06. Shaft to bearing clearances under maximum loads shall be such that excessive or insufficient clearances cannot develop between disc and seat surfaces particularly when the disc is in the sealed (vertical) position.
- 3.3.4.10 All External Ferrous Items, except cast iron, shall be hot-dipped galvanized in accordance with ASTM Standard A123-09, "Zinc (Hot-

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Dip Galvanized) Coatings on Iron and Steel Products”, or ASTM Standard A153-09, “Zinc Coating (Hot-Dip) on Iron and Steel Hardware”, or stainless steel.

3.3.4.11 Shaft Seals shall be as required by Section 4.3.7 of ANSI/AWWA Standard C504-06.

3.3.4.12 Operators

3.3.4.12.1 Manual operators for valves 24-inch and smaller shall be of totally enclosed worm gear or traveling-nut type, permanently lubricated, suitable for buried or submerged operation in accordance with ANSI/AWWA Standard C504-06. Manual operators shall be provided with completely enclosed mounting brackets or adapters. The operators for valves through 24-inch shall be sized to provide the maximum torque required by the valve they are to operate and that torque shall be calculated by the methods used in AWWA Manual of Water Supply Practices, M49, “Butterfly Valves, Torque, Head Loss, and Cavitation Analysis”. All valve torque requirements shall be calculated using the maximum pressure differential and velocity for Class 150B valves

3.3.4.12.2 Manual operators for valves 30-inch and above shall be totally enclosed worm gear operators, permanently lubricated, suitable for buried and submerged operation, and shall be Limitorque Type HBC (no substitutions), in accordance with ANSI/AWWA Standard C504-06, with AWWA Input Shaft Stop. The valve manufacturer shall insure that any gear lash, tolerance or other mechanism creating movement or “play” in the operator/valve control system does not adversely affect the valve seal. As previously specified, no disc stops are allowed on the body. Manual operators shall be provided with completely enclosed mounting brackets or adapters. The operators for 30 through 72-inch valves shall be sized to provide the maximum torque required by the valve they are to operate and that torque shall be calculated by the methods used in AWWA Manual of Water Supply Practices, M49, “Butterfly Valves, Torque, Head Loss, and Cavitation Analysis”. All valve torque requirements shall be calculated using the maximum pressure differential and velocity for Class 150B valves.

3.3.4.12.3 The 84-inch and larger valves, operators and accessories shall be designed for the following conditions, in accordance with AWWA Manual of Water

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Supply Practices, M49, "Butterfly Valves, Torque, Head Loss, and Cavitation Analysis", but shall not be less than the 8½-inch minimum shaft diameter value given in ANSI/AWWA Standard C504-06, Table 3, for 72-inch, Class 150B, valves.

Fluid handled:	Water at ambient temperature
Velocity through valve:	8 feet per second, bi-directional
Shut-off pressure:	150-PSIG minimum on either side
Opening or closing time:	6 minutes
Operator torque calculations	Per AWWA Manual of Water Supply Practices, M49, "Butterfly Valves, Torque, Head Loss, and Cavitation Analysis"

3.3.4.12.4

In addition to the above, the operator shall be capable of withstanding an input torque of 300 ft. lbs. on the operating nuts and all operators on valves 30-inch and larger shall be equipped with an AWWA input shaft stop. The operator shall be equipped with adjustable stops to prevent over travel of the disc in both the closed and opened positions, with standard AWWA 2-inch square operating nuts with skirts. All valves shall open by turning the operating nuts counterclockwise. Each operator for the valves 30-inch and larger shall be equipped with a brass plate die-stamped with letters and numerals, at least ½-inch high, indicating the number of turns necessary to fully open the valve from a full closed position as determined by factory test. The plate shall be secured to the operator so that it may be read from the top when the valve is in an installed position. As previously specified, operators shall be for buried, submerged conditions which precludes installation of a position indicator. However, where valves and operators are ordered for above grade service, a position indicator shall be located in the top of the operator to show the position of the butterfly valve. This indicator shall remain synchronized during operation. The position indicator shall be weatherproof.

3.3.4.12.5

After mounting, each operator shall be factory adjusted to insure that the valve will operate from a fully open to

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a fully closed (seated) position without further adjustment by the installer. An affidavit shall be furnished with each valve from the manufacturer certifying this. The affidavit shall also state the number of turns required to fully open the valve from a fully closed position as determined by factory test, and certify that the valve is set to open in a counterclockwise direction. For valves of 54-inch and above, two copies of this certification shall be signed, sealed and dated by a licensed professional engineer registered to practice in the state where the tests and adjustments are performed.

3.3.4.13 Torque Limiting Device

Each valve shall be provided with a torque-limiting device designed to protect the actuator and valve parts. The device shall consist of an over torque protection mechanism enclosed in a hermetically sealed cast iron housing. The mechanism shall be permanently lubricated and factory set to trip between 200 and 220 ft. lbs. of applied torque. The housing shall have integrally cast, 2-inch AWWA operating nut and matching socket to operate and to fit over the actuator or extension shaft nuts, respectively. The socket shall be provided with a setscrew to fit the device. The direction of rotation shall be permanently shown with word and arrow next to the operating nut. The entire device shall be coated inside and out with a 2-part epoxy. The torque limiting device shall be as manufactured by Annspace Controls Company of St. Louis, Missouri, or approved equal.

3.3.4.14 The Interior Coating of the valve bodies shall be a two-part epoxy specially formulated for potable water service and applied according to the coating manufacturer's recommendations. The coating shall conform to ANSI/AWWA C550-01, "Protective Interior Coatings for Valves and Hydrants", and shall not contain coal tar. All parts of the interior of the valve body and disc, except for rubber or stainless steel, shall be so coated.

3.3.4.15 Exterior Painting shall be asphalt varnish conforming to Federal Specification TT-C-494A as required by Section 4.4.2.2 of ANSI/AWWA Standard C504-06.

3.3.4.16 Testing

The butterfly valves shall be tested in accordance with ANSI/AWWA C504-06, Section 5, Subsection 5.1. The performance test (Subsection. 5.1.1) and the hydrostatic test (Subsection. 5.1.3) shall be performed as stated, but the leakage test (Subsection. 5.1.2) shall be performed bi-directionally; first on one side of the valve, and then on the other.

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- 3.3.4.17 For valves 54-inch and above, the bidder shall provide certification that the valves have been further subjected to factory hydrostatic testing at their rated pressure of 150 psig while standing in the vertical (installation) position, bi-directionally; first on one side of the valve, and then on the other, with operator installed and operational. Duration of the test for each direction shall be a minimum of ten minutes and no leakage is permitted. The manufacturer shall not make any special modifications or special provisions to prevent leakage past the seat or elsewhere during this test.
- 3.3.4.18 The bidder shall include a certified manufacturer's test report with each shipped valve, stating that the valve has met the requirements of each of the various tests. For 54-inch and above valves, the certification shall be signed, dated and sealed by a licensed professional engineer registered to practice in the state where the valve is manufactured, or if different, where the valve is tested. Failure to provide this certification will be cause for rejection by the Water and Sewer Department of the particular valve shipment.
- 3.3.4.19 The bidder is hereby notified that, upon delivery, the installer shall be required to pressure test the valve, and cycle the valve as a test of function above grade, prior to installation. It is fully expected and required by the Water and Sewer Department that the valve shall be manufactured, tested and shipped such that upon testing by the installer, no leakage will be discovered and no readjustment of the operator will be required. To this end, on large valves, the bidder may desire to have a factory technician present for delivery and installer testing of the valve and operator. The Water and Sewer Department will cooperate with a request of this sort to the extent of minor coordination with the installer. However, all costs for such personnel and activities shall be borne by the bidder, including insurance, and shall be included in its quoted price.
- 3.3.4.20 **Witnessed Testing**
- Witnessed testing shall be performed within the Continental United States. The Water and Sewer Department may send a representative to witness such test. If the Water and Sewer Department opts to witness such test, the bidder will be notified within forty-five (45) calendar days of when the order is placed. If multiple valves are ordered, they shall be tested consecutively, so that the Water and Sewer Department's representative may be able to witness all tests in one trip. Test valves shall be complete with nameplates and serial numbers. The bidder shall bear all costs associated with the testing. The Water and Sewer Department shall bear all travel costs associated with the County representative visiting the test site. The bidder shall notify the Water and Sewer Department's representative at least twenty-one (21) days prior to the test, so that travel arrangements may be made. The bidder shall pre-test the valves prior to the witnessed test. If it becomes necessary for the Water and Sewer Department's representative to return to witness a repeated



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test on a valve that has previously failed such test, the travel-related costs associated with the Water and Sewer Department representative's return trip will be deducted from the monies owed to the bidder.

- 3.3.4.21 The butterfly valves shall conform to the appropriate AWWA Standard as modified in the Technical Specifications herein, and as manufactured by DeZurik, Henry Pratt, Olson or approved equal.

3.3.5 Gate Valves, General

- 3.3.5.1 All valves specified herein, whether manufactured under the provisions of AWWA C500-09 "Metal-Seated Gate Valves for Water Supply Service"; C509-09 "Resilient-Seated Gate Valves for Water Supply Service" or C515-09 "Reduced-Wall, Resilient-Seated Gate Valves for Water Supply Service" shall be furnished with an Affidavit of Compliance from the manufacturer as required by Section 6.3 of AWWA C515-09. This Affidavit of Compliance shall state that the valve and all materials used in its construction conform to the applicable requirements of the standard under which the valve is manufactured and the Water and Sewer Department's specifications and that all tests specified in the applicable standard have been performed and all test requirements met. The Affidavit shall accompany the packing list for the valves purchased by the Water and Sewer Department.

- 3.3.5.2 All work performed, except prototype testing, shall be subject to inspection and acceptance by the Water and Sewer Department or its representatives who shall have access to all places of manufacture where these valves are being produced and tested. Bidders shall, with their shop drawing submittals, submit the company name and location of the actual manufacturer of the valve which shall include Country, City, and street address of the manufacturer. Where components of the valves are out sourced, the same data shall be supplied for the manufacturers of the various components if so required by the Water and Sewer Department. The records of all tests as specified in Section 4.2.4 of AWWA C500-09, 4.2.3 of AWWA C509-09 and AWWA C515-09 shall be made available to the Water and Sewer Department if so required. Where valves are not domestically produced and tested, the Water and Sewer Department may require that the Affidavit of Compliance be signed and sealed by a Professional Engineer, licensed to practice in the state of where the importing firm is located or the State of Florida. When this is required, the Water and Sewer Department's decision as to its necessity shall be final and no extra compensation will be allowed.

3.3.5.3 Copper Alloys

- 3.3.5.3.1 Copper alloys containing more than 16 percent zinc shall not be used in the fabrication of any of the various valve types listed in this specification. Copper alloys

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containing 16 percent or less of zinc shall not contain less than 79 percent copper. Aluminum bronzes, if used, shall not dealuminize and the method of preventing this shall be fully described in the submittal.

- 3.3.5.3.2 AWWA Standard C500-09 lists a number of copper alloys for valve stems, gates and thrust collars. Of these the Water and Sewer Department will accept alloys with the following Unified Numbering Series (UNS) numbers; C66100, C87500, C87600, C99400 and C99500. This same standard lists other copper alloys for Stem Nuts and Gates. Of these the Water and Sewer Department will accept alloys with the following UNS numbers; C83450, C83600, C84400, C87600, C87610, C95200, C95300, C95500, C99400 and C99500.
- 3.3.5.3.3 AWWA Standard C509-09 lists a number of copper alloys for valve stems, gates and thrust collars. Of these the Water and Sewer Department will accept alloys with the following Unified Numbering Series (UNS) numbers; C66100, C87500, C87600, C87610, C95200, C95300, C95500, C99400 and C99500. This same standard lists other copper alloys for Stem Nuts and Gates. Of these the Water and Sewer Department will accept alloys with the following UNS numbers; C83450, C83600, C95200, C95500, C95800 C99400 and C99500.
- 3.3.5.3.4 AWWA Standard C515-09 lists a number of copper alloys for valve stems, gates and thrust collars. Of these the Water and Sewer Department will accept alloys with the following Unified Numbering Series (UNS) numbers; C66100, C865002, C87500, C87600, C87610, C95200, C95300, C95500, C99400 and C99500. This same standard lists other copper alloys for Stem Nuts and Gates. Of these the Water and Sewer Department will accept alloys with the following UNS numbers; C83600, C83450, C84400, C87500, C87610, C95200, C95300, C95500, C95800 C99400 and C99500.
- 3.3.5.3.5 Other copper alloys not listed in the standards may be used but must meet the performance requirements of the particular standard, including but not limited to, minimum yield strength, chemical requirements and corrosion. The Water and Sewer Department requires that alloys containing more than sixteen (16) percent zinc or less than 79 percent copper shall not be used. No alloy containing more than eight (8) percent lead may be used.

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3.3.5.4 Valve Position and Gearing

In instances where cover over the main and the height of the valve together permit the gate valve, if installed vertically, to have a minimum cover of two feet six inches (2'-6") or greater over the top of the valve, the valve may be installed with stem vertical and equipped with spur rather than bevel gearing. Note that mains shall not be deliberately lowered for this reason.

3.3.6 Double Disc Gate Valve

3.3.6.1 Gate valves 3-inch and larger shall be manufactured in accordance with the applicable provisions of ANSI/AWWA Standard C500-09, "Metal-Seated Gate Valves for Water Supply Service", as modified herein. The valves are to be installed under buried and/or submerged conditions.

3.3.6.2 All gate valves shall be bronze-mounted, and shall have a cast or ductile iron body, parallel or inclined seats, double discs and a non-rising stem. Stem shall be bronze. Valve body and bonnet gaskets shall be rubber or rubber composition, inorganic mineral fiber and paper are not acceptable. Rubber and rubber composition materials shall be suitable for use in water containing chlorine or chloramines and in sanitary sewage. All 16-inch and larger gate valves shall be equipped with gearing and extended gear cases conforming with Section 4.4.14 of AWWA C500-09. It is anticipated that the normal configuration will be bevel gearing. However, the Water and Sewer Department may order straight gearing when suitable for a specific application with no change in pricing allowed. Disk spreading devices shall be Monel, AISI type 316 stainless steel or bronze. Valves shall open by rotating the valve stem counterclockwise, and shall have an AWWA 2-inch square operating nut with skirt.

3.3.6.3 All External Ferrous Items, except cast iron, shall be hot-dipped galvanized in accordance with ASTM Standard A123-09, "Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products", or ASTM Standard A153-09, "Zinc Coating (Hot-Dip) on Iron and Steel Hardware", or stainless steel.

3.3.6.4 "O"-Ring Stem Seals shall be neoprene, Buna-N, Nitrile or approved equal. No natural rubber compounds will be acceptable. The stem seals shall be of design that permits the replacement of the "O"-ring seals while the valve is in service, without undue leakage.

3.3.6.5 Flanged Valves shall have ends faced and drilled conforming to ANSI Standard B16.1, Class 125. Bolt holes in the flanges shall be equally spaced and shall straddle the vertical and horizontal centerlines. Joint materials for flanged valves will be furnished by others.

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- 3.3.6.6 Mechanical Joint Valves shall have ends complying with ANSI/AWWA Standard C111/A21.11-00, "Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings". Mechanical joint gaskets, glands, tee-head bolts and hex nuts shall be included with the valve. Segmented glands or follower glands held in place with set screws will not be acceptable. Bolt holes in the flanges of the mechanical joint shall be equally spaced and shall straddle the vertical centerline. Gaskets shall be shipped separately in suitable protective containers. Valves for use in sewerage shall have neoprene gaskets.
- 3.3.6.7 Gate Valves 20-inch and Larger shall have bypass gate valves sized in accordance with Table 8 of ANSI/AWWA Standard C500-93. The bypass valves shall conform to the applicable requirements for the gate valves specified herein, and with the requirements listed below. The bypass valves shall be one of the following types:
- 3.3.6.7.1 The valve shall have ANSI Standard B16.1, Class 125, end flanges for connecting to adapter fittings which in turn connect to bosses on the main valve. Joint materials shall be ANSI sized and approved, 1/8-inch thick full-faced rubber gaskets and hot-dip galvanized steel or stainless steel bolts and nuts.
- 3.3.6.7.2 The valve shall be integral with the bypass unit which connects directly to bosses on the main valve without the use of adapter fittings. Joint materials and the shape of the gasket may be the manufacturer's standard, except that the gasket shall be at least 1/8-inch thick, full-faced and the bolts and nuts shall be hot-dip galvanized steel or stainless steel.
- 3.3.6.8 The bypass valve shall be completely mounted to the gate valves specified herein by the manufacturer.
- 3.3.6.9 Testing - All prototype Proof of Design Testing as called for in ANSI/AWWA C500-09 Sections 5.1.1.1, Torque Test, and 5.1.1.2, Leakage Test, together with 5.1.2, Operation Test, shall have been performed for each size of valve supplied. All production tests shall be performed on all valves supplied without exception. Hydrostatic tests shall be performed as specified in Sections 5.1.3.1 and 5.1.3.2 (as applicable to the design of valve being purchased) of ANSI/AWWA C500-09. An Affidavit of Compliance as specified in Section 6.3 of C500-09 shall be furnished to the Water and Sewer Department with the packing list for the valves purchased by the Water and Sewer Department.
- 3.3.6.10 The gate valves shall conform with the appropriate AWWA standard as modified herein and as manufactured by U.S. Pipe and Foundry Co., American Flow Control, Mueller or approved equal.

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3.3.7 Resilient-Seated Gate Valves

- 3.3.7.1 Resilient-seated gate valves shall be manufactured in conformance with the applicable provisions of ANSI/AWWA Standard C509-09, "Resilient-Seated Gate Valves for Water Supply Service", as modified herein or in conformance with the applicable provisions of ANSI/AWWA Standard C515-09 "Reduced-Wall Resilient-Seated Gate Valves for Water Supply Service" as modified herein.
- 3.3.7.2 Valves shall have non-rising stems (NRS) and are to be installed under buried and/or submerged conditions. For valves manufactured in conformance with the provisions of AWWA C509 as modified herein, the design working water pressure shall be a minimum of 200 psig for valves of 3-inch through 12-inch size and 150 psig for 16 through 36-inch sizes. For valves manufactured in conformance with the provisions of AWWA C515 as modified herein, the design working water pressure shall be a minimum of 200 psig for all sizes. In addition to the pressure requirements, for valves manufactured under either standard, the valve assembly and mechanism shall be capable of withstanding an input torque of 250 ft. lbs. for valves 4-inch and smaller, 350 ft. lbs. for 6 through 12-inch, 400 ft. lbs. for 16 through 24-inch, 500 ft. lbs. for 30-inch, 600 ft. lbs. for 36-inch, 700 ft. lbs. for 42-inch and 800 ft. lbs. for 48-inch valves. With the valve open the unobstructed waterway shall have a diameter not less than the full nominal diameter of the valve.
- 3.3.7.3 Valve Body and Bonnet
- All resilient-seated gate valves manufactured in conformance with AWWA C509-09 shall be iron-bodied and shall conform to ASTM Standard A126-04(2009), "Gray Iron Castings for Valves, Flanges, and Pipe Fittings", Class B; ASTM Standard A395-99(2009), "Ferritic Ductile Iron Pressure-Retaining Castings for Use at Elevated Temperatures"; or ASTM Standard A536-84(2009), "Ductile Iron Castings". Valve body and bonnet thickness shall conform with the requirements of AWWA Standard C509-09.
- 3.3.7.4 Valves manufactured in conformance with AWWA C515-09 shall be iron-bodied and shall conform to ASTM Standard A395-99(2009), "Ferritic Ductile Iron Pressure-Retaining Castings for Use at Elevated Temperatures" or ASTM Standard A536-84(2009) "Ductile Iron Castings". Body and bonnet thickness shall conform with the requirements of AWWA Standard C515-09.
- 3.3.7.5 All ferrous metal items in contact with the line fluids, except gray or ductile cast iron, shall be AISI Type 316 stainless steel. Valve body and bonnet gaskets shall be rubber or rubber composition, inorganic mineral fiber and paper are not acceptable. Rubber and rubber composition materials shall be suitable synthetic for use in water containing chlorine or chloramines and in sanitary sewage. No natural rubber containing compounds shall be used.

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- 3.3.7.6 Gates shall be made of ductile iron, grey iron or copper alloys as specified for their particular standard in Paragraph 3.6, "Gate Valves, General".
- 3.3.7.7 Stems, thrust collars, stem nuts and gates (if made of copper alloy) shall be constructed of the alloys listed for those items in Section 3.04, "Gate Valves, General" section of this specification. The same items for valves made in conformance with C515-09 shall be made of the alloys specified for that standard in the same section. The stem diameter shall conform to Table 7 of either C509 or C515 as appropriate. All valves shall be equipped with an ANSI/AWWA standard 2-inch square operating nut with skirt, or handwheel when required for above-ground service. Valve stems shall rotate counterclockwise to open. All valves 16-inch and larger shall be equipped with gearing conforming with their particular AWWA standard. It is anticipated that the normal configuration will be bevel gearing. However, the Water and Sewer Department may order straight gearing when suitable for a specific application with no change in pricing allowed.
- 3.3.7.8 "O"-Ring Stem Seals shall be neoprene, Buna-N, or approved equal. No natural rubber compounds will be acceptable. The stem seals shall be of design that permits the replacement of the "O"-ring seals while the valve is in service, without undue leakage.
- 3.3.7.9 All External Ferrous Items, except gray or ductile cast iron, shall be hot dipped galvanized in accordance with ASTM Standard A123-09, "Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products", or ASTM Standard A153-09, "Zinc Coating (Hot-Dip) on Iron and Steel Hardware", or stainless steel.
- 3.3.7.10 Resilient Seats shall be applied to the gate only and shall seat against a corrosion-resistant surface. The surface shall be nonmetallic, applied in a manner to withstand the action of line fluids and the operation of the sealing gate under long-term service and shall coat all surfaces in contact with the liquid. The nonmetallic surface interior surface coating shall conform with ANSI/AWWA Standard C550-05, "Protective Interior Coatings for Valves and Hydrants". Resilient seats shall be bonded or mechanically attached to the gate. No natural rubber products will be acceptable. Seat materials shall be Neoprene, EPDM, Nitrile or approved equal and shall have excellent resistance to sewage combined with good to excellent resistance to compression set. The method used for bonding or vulcanizing the resilient seat material to its substrate shall be proven by ASTM Standard D429-08, "Test Methods for Rubber Property-Adhesion to Rigid Substrates", Method A or B. For method A, the minimum strength shall not be less than 250 PSI. When Method B is applicable, the peel strength shall not be less than 75 lb/in. All exposed mechanical attaching devices and hardware used to retain the resilient seat shall be of AISI Type 316 stainless steel.

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- 3.3.7.11 Flanged Valves shall have ends faced and drilled conforming to ANSI Standard B16.1, Class 125. Bolt holes in the flanges shall be equally spaced and shall straddle the vertical and horizontal centerlines. Hollow back flanges shall not be acceptable. Joint materials for flanged valves will be furnished by others.
- 3.3.7.12 Mechanical Joint Valves shall have ends complying with ANSI/AWWA Standard C111/A21.11-07, "Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings". Mechanical joint gaskets, glands, tee-head bolts and hex nuts shall be included with the valve. Segmented glands or follower glands held in place with set screws will not be acceptable. Bolt holes in the flanges of the mechanical joint shall be equally spaced and shall straddle the vertical centerline. Gaskets shall be shipped separately in suitable protective containers. Valves for use in sewage shall have neoprene gaskets.
- 3.3.7.13 Painting And Coatings shall conform to the requirements of Fed. Spec. TT-C-494B or AWWA C550 on exterior ferrous surfaces, and ANSI/AWWA Standard C550-05 for the interior of the valve. Interior and exterior coatings shall conform with AWWA C515-01, Section 4.5.2 "Coating".
- 3.3.7.14 Testing
- All prototype Proof of Design Testing as called for in ANSI/AWWA C509-09 and AWWA C515-09 Sections 5.1.1.1, Hydrostatic Test; 5.1.1.2, Torque Test; 5.1.1.3, Leakage Test; and 5.1.1.4 Hydrostatic Shell Test; shall have been performed for each size of valve supplied. All production tests shall be performed on each valve supplied without exception. Operation Test, Shell Test and Seat Test shall be performed as specified in Sections 5.2.1, 5.2.2 and 5.2.3 respectively on valves manufactured under C509 and the same tests as specified in Sections 5.1.2.1, 5.1.2.2 and 5.1.2.3 respectively of C515. An Affidavit of Compliance as specified in Section 6.3 of both C509-09 and C515-09 shall be furnished to the Water and Sewer Department with the packing list for the valves purchased by the Water and Sewer Department.
- 3.3.7.15 The gate valves shall conform with the appropriate AWWA standard as modified herein and as manufactured by U.S. Pipe and Foundry Co., American Flow Control, Mueller or approved equal.

**3.3.8 Tapping Valves**

- 3.3.8.1 Tapping valves, including the bypass valves for double-disc tapping valves 20-inch and larger, shall conform to the applicable requirements for the gate valves specified herein, and also with the requirements listed below.

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- 3.3.8.2 With the valve open, an unobstructed waterway shall be provided, the diameter of which shall be at least the full nominal diameter of the valve, to permit taps to be made through the valve.
- 3.3.8.3 Tapping valves shall have a mechanical joint outlet end conforming to ANSI/AWWA Standard C111/A21.11-00, "Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings" or a flanged outlet conforming to ANSI Standard B16.1 Class 125 (as called for in the particular valve order), for connection to new piping and a flanged inlet with centering ring (for all valves of 12-inch diameter and smaller and for all larger valves where the manufacturer produces a centering ring flange in that size), for connecting to the tapping sleeve. For tapping valves 12-inch and smaller, the sleeve shall be in compliance with all applicable provisions of MSS Standard Practice SP 60, latest revision, as developed and approved by the Manufacturers Standardization Society of the Valve and Fittings Industry, 127 Park Street N.E., Vienna, Virginia 22180. For tapping valves larger than 12-inch, the connecting flanged joint between the tapping sleeve and the tapping valve shall be industry standard; however, the tapping valve must provide a matching fit with tapping sleeves by other manufacturers.
- 3.3.8.4 The tapping valves, including bypass valve when applicable, shall be furnished complete with all joint materials. Joint materials for the flanged inlets shall be ANSI-sized and approved and shall include 1/8-inch thick full faced gaskets and hot-dip galvanized carbon steel bolts and nuts with internal threads tapped or retapped after galvanizing or stainless steel bolts and nuts. The flanged inlet gaskets shall conform to the gasket material and property requirements set forth in ANSI/AWWA Standard C111/A21.11-00. All inlet flange and pipe connection gaskets for use in sewer applications shall be neoprene and SBR for potable water applications. Natural rubber shall not be used in any application. Seal shall be neoprene, Buna-N, Nitrile, EPDM or approved equal, but not natural rubber. The mechanical joint outlets shall include the necessary joint materials conforming to the requirements of joint materials for mechanical joint ended gate valves of the appropriate type specified herein (neoprene for use with sewer). Bolt holes in the flanges of the mechanical joint shall be equally spaced and shall straddle the vertical centerline. Gaskets shall be shipped separately in suitable protective containers.
- 3.3.8.5 Valve operators for tapping valves 20-inch and larger shall be located to the right or left (when looking into the mechanical joint outlet end) as ordered by the Water and Sewer Department. In instances where cover over the main and the height of the valve together permit the tapping valve, if installed vertically, to have a minimum cover of two feet six inches (2'-6") or greater over the top of the valve, the valve may be installed with stem vertical and equipped with spur rather than bevel gearing. Note that mains shall not be deliberately lowered for this reason.



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- 3.3.8.6 The valves shall be suitable for use with ductile-iron pipe conforming to ANSI/AWWA Standard C151/A21.51-09, "Ductile-Iron Pipe, Centrifugally Cast".
- 3.3.8.7 The tapping valves shall conform with the appropriate AWWA valve standard as modified herein and as manufactured by U.S. Pipe and Foundry Co., American Flow Control, Mueller or approved equal.
- 3.3.8.8 Testing - All prototype Proof of Design Testing as called for in ANSI/AWWA C509-09 and AWWA C515-09 Sections 5.1.1.1, Hydrostatic Test; 5.1.1.2, Torque Test; 5.1.1.3, Leakage Test; and 5.1.1.4 Hydrostatic Shell Test; shall have been performed for each size of valve supplied. All production tests shall be performed on each valve supplied without exception. Operation Test, Shell Test and Seat Test shall be performed as specified in Sections 5.2.1, 5.2.2. and 5.2.3 respectively on valves manufactured under C509 and the same tests as specified in Sections 5.1.2.1, 5.1.2.2 and 5.1.2.3 respectively of C515. An Affidavit of Compliance as specified in Section 6.3 of both C509-09 and C515-09 shall be furnished to the Water and Sewer Department with the packing list for the valves purchased by the Water and Sewer Department.
- 3.3.8.9 The tapping valves shall conform with the appropriate AWWA valve standard as modified herein and as manufactured by U.S. Pipe and Foundry Co., American Flow Control, Mueller or approved equal.
- 3.3.9 Check Valves
- 3.3.9.1 The swing-check valves shall be standard (plain), outside lever-and-weight or outside lever-and-spring types, for normal horizontal installations, conforming to all of the applicable requirements of ANSI/AWWA Standard C508-09, "Swing-Check Valves for Waterworks Service, 2-In. (50mm) through 24 In. (600mm) NPS", as modified herein. The valves shall be iron body, bronze mounted and of the buried service type.
- 3.3.9.2 Valve bonnet opening shall be large enough to allow ample clearance for direct removal of disc by hand.
- 3.3.9.3 All External Ferrous Items, except cast iron, shall be hot-dipped galvanized in accordance with ASTM Standard A123-09, "Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products", or ASTM Standard A153-09, "Zinc Coating (Hot Dip) on Iron and Steel Hardware", or stainless steel.
- 3.3.9.4 Flanged Valves shall have ends plain-faced and drilled conforming to ANSI Standard B16.1, "Cast Iron Pipe Flanges and Flanged Fittings", Class 125. Boltholes in the flanges shall be equally spaced and shall straddle the vertical and horizontal centerlines. Others will furnish all joint materials for flanged valves.

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- 3.3.9.5 The check valves shall be so constructed that the clapper swings clear of the waterway when the valve opens, permitting a full flow through the valve equal to the nominal diameter of the pipe.
- 3.3.9.6 The body and clapper-seating surface shall be metal to metal, and shall be bronze.
- 3.3.9.7 The clapper disc and the clapper hinge arm, including the clapper disc cap screw, shall be bronze or cast iron (clapper disc screw may also be Type 316 stainless steel). Clapper to hinge arm connection shall be such that the unit cannot be unscrewed by fluid flow.
- 3.3.9.8 The Clapper Hinge Pin shall be AISI Type 316 stainless steel. The clapper hinge pin shall rest in bronze bushing and for check valves with outside lever, shall extend through the casing on the right hand side when facing the valve inlet. The clapper hinge pins shall rest in bronze bushings provided with a packing type seal ("O"-rings are not acceptable) and shall extend through the casing on the right hand side when facing the valve inlet. An opening shall be provided in each of two bosses on the body for easy access to either end of the hinge pin. The openings shall be tapped and provided with plugs.
- 3.3.9.9 Besides check valves for new installations, the Water and Sewer Department will be replacing a number of check valves in its existing water and sewer systems. The replacement valves, in addition to the requirements specified herein above for valves used in new installations, must be of the same laying length (flange face to flange face) as the valve it is to replace, to insure a proper fit between the pipeline flanges in the existing mains.
- 3.3.9.10 Testing- All check valves shall be tested at the factory in accordance with Section 5.2 of ANSI/AWWA Standard C508-09 and a Certified Test Report shall be furnished with each valve.
- 3.3.10 Plug Valves
- 3.3.10.1 All valves specified herein shall be furnished with an affidavit from the manufacturer certifying that the valves furnished under this contract comply with all applicable provisions of the AWWA specifications as revised and cited below. The affidavit shall accompany the packing slip for the valves.
- 3.3.10.2 The plug valves shall be of the non-lubricated eccentric type, with resilient faced plugs, and shall be designed for a minimum design pressure in accordance with ANSI/AWWA C517-09 "Resilient-Seated Cast-Iron Eccentric Plug Valves"; IE 175 psig for 3 inch through 12 inch and 150 psig for 14 inch through 72 inch. Plug valves 20-inch and smaller shall have an 80 percent minimum port area. Plug valves 24-inch and larger shall be full opening with 100 percent port area. Plug valves, 8-inch and smaller shall be designed for operation in a horizontal pipeline with the valve shaft in a vertical position. Plug

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valves larger than 8-inch shall be designed for operation in a horizontal pipeline, with the valve shaft in the horizontal position and the operator (actuator) shaft in the vertical position.

- 3.3.10.3 The plug valves shall be as manufactured by DeZurik, or approved equal, and shall be the standard product of a manufacturer which has produced and sold such equipment for a period of at least five (5) years. Valves shall be suitable for buried, submerged service.
- 3.3.10.4 Flanged valves shall have ends plain-faced and drilled conforming to ANSI Standard B16.1, "Cast Iron Pipe Flanges and Flanged Fittings", Class 125. Bolt holes in the flanges shall be equally spaced and shall straddle the vertical and horizontal centerlines. All joint materials for flanged valves will be furnished by others.
- 3.3.10.5 Mechanical joint valves shall have ends complying with ANSI/AWWA Standard C111/A21.11-00. "Rubber-Gasket Joints for Ductile Iron Pressure Pipe and Fittings". Mechanical joint gaskets, glands, tee-head bolts and hex nuts shall be included with the valve. Segmented glands or follower gland held in place by set screws will not be acceptable. Bolt holes in flanges of the mechanical joint shall be equally spaced and shall straddle the vertical centerline. Gaskets shall be shipped separately in suitable protective containers. Valves for use in sewage shall have neoprene gaskets.
- 3.3.10.6 Plug valve body and plug shall be of cast iron conforming to the requirements of ASTM Standard A126-04 (2009), "Gray Iron Castings for Valves, Flanges and Pipe Fittings", Class B, and all exposed-to-line-fluid nuts, bolts, springs washers, and similar component items shall be AISI Type 316 stainless steel. Resilient plug facing shall be of neoprene.
- 3.3.10.7 Plug valves shall be furnished with a corrosion-resistant body seat consisting of a welded-in overlay of high nickel content on all surfaces contacting the plug face and shall comply with ANSI/AWWA Standard C517-09, "Resilient-Seated Cast-Iron Eccentric Plug Valves, Section 4.3.3.4.
- 3.3.10.8 Plug valves shall be furnished with replaceable, sleeve-type AISI Type 316 stainless steel bearings in the upper and lower journals, and shall comply with ANSI/AWWA Standard C517-09 Sections 4.3.3.6, 4.4.6 and thrust bearings shall comply with Sections 4.4.3.6 and 4.4.8.
- 3.3.10.9 Plug valve shaft seals shall be designed for replaceable, manually adjustable, multiple ring "V" or "U" type packing of Buna-N or neoprene. The valves shall be of the bolted-bonnet type and shall comply with ANSI/AWWA Standard C517-09 Section 4.4.1.
- 3.3.10.10 Plug valves shall have stops at the fully opened and fully-closed positions.

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- 3.3.10.11 Plug valves shall be designed for drip-tight shut-off in wet service applications at pressure differentials up to the full rating of the valve with pressure in either direction. Plug valves shall be provided with a manual operator sized to suit the maximum differential pressure across the valves. Minimum plug valve operator output torques shall equal or exceed the values specified in the table below:

<u>PLUG VALVE SIZE</u>	<u>REQUIRED ACTUATOR OUTPUT TORQUE</u>	
	<u>100 PSI</u>	<u>150 PSI</u>
12"	1,063 FT-LBS	1,438 FT-LBS
14"	1,638 FT-LBS	2,225 FT-LBS
16"	2,213 FT-LBS	3,013 FT-LBS
18"	3,300 FT-LBS	4,500 FT-LBS
20"	4,388 FT-LBS	5,975 FT-LBS
24" (100%)	10,000 FT-LBS	12,790 FT-LBS
30" (100%)	15,875 FT-LBS	19,550 FT-LBS
36" (100%)	27,000 FT-LBS	38,750 FT-LBS
42" (100%)	45,000 FT-LBS	63,195 FT-LBS
48" (100%)	45,000 FT-LBS	63,195 FT-LBS
54" (100%)	65,000 FT-LBS	92,860 FT-LBS
60" (100%)	65,000 FT-LBS	92,860 FT-LBS
72" (69%)	65,000 FT-LBS	92,860 FT-LBS

- 3.3.10.12 Manufacturer shall supply operators producing larger output torque values if so required by their valves, but in no case shall operator output torque be less than that shown for the particular valve size and pressure. Actuators shall be designed to produce the required operating torque with a maximum rim pull of 80 lb. on the handwheel or a maximum input torque of 150 ft-lbs on the wrench nut.
- 3.3.10.13 In addition, the operator shall be capable of withstanding an input torque of 300-ft. lbs. on the operating nuts or a pull of 200 pounds on the handwheel without damage to operator components between the input and the stops. Operators on valves 30-inch and larger shall also be equipped with an AWWA input shaft stop.
- 3.3.10.14 All external ferrous items, except cast iron, shall be hot-dipped galvanized in accordance with ASTM Standard A123-89a, "Zinc (Hot-Galvanized) Coatings on Iron and Steel Products", or ASTM Standard A153-82 (1987), "Zinc Coating (Hot-Dip) on Iron and Steel Hardware", or stainless steel.
- 3.3.10.15 Manual operators for valves 8-inch and smaller shall be lever actuated.
- 3.3.10.16 Manual operators for valves 10-inch to 24-inch shall be totally enclosed traveling-nut or worm gear type, permanently lubricated, suitable for buried and/or submerged conditions.

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- 3.3.10.17 Manual operators for valves 30-inch and larger shall be totally enclosed worm gear operators, permanently lubricated, suitable for buried and/or submerged conditions, and shall be Limitorque type HBC (no substitutions).
- 3.3.10.18 Manual operators shall be provided with completely enclosed mounting brackets or adapters. The operators shall be equipped with adjustable stops to prevent overtravel in both the open and closed position with standard 2-inch square operating nuts with skirts or with handwheels, and with a shear pin designed to protect the operator from damage due to overload. All plug valves shall open by turning the operating nut or handwheel counterclockwise.
- 3.3.10.19 All operator components between the operating nut and the adjustable stops shall be designed to withstand, without damage, an input torque of 300 ft. lbs.
- 3.3.10.20 The combination centering-identification plate, with a drilled or punch center hole, shall be slipped onto the shaft prior to the attaching the operating nut or handwheel. Each operator for valves 24-inch and larger shall be equipped with a plate die-stamped with letters and numerals, at least 3/8-inch high, indicating the number of turns necessary to fully open the valve from a full closed position as determined by factory test. The plate shall be secured to the operator so that it may be read from the top when the valve is in an installed position. The plate shall be 1/8-inch thick AISI Type 316 stainless steel with an outside diameter of 6-3/4 inches. The top of the plate shall be buffed to remove mill scale, and the following information shall be stamped into the top of the plate in letters and numerals; valve manufacturer, valve type, size and class, direction to open, and number of turns to fully open from a fully closed position.
- 3.3.10.21 Each valve, 20-inch and larger, shall be provided with a torque limiting device designed to protect the actuator and valve parts. The device shall consist of an overtorque protection mechanism enclosed in a hermetically sealed cast iron housing. The mechanism shall be permanently lubricated and factory set to trip between 200 and 220 ft. lbs. of applied torque. The housing shall have an integrally cast, 2-inch AWWA operating nut and matching socket to operate and to fit over the actuator or extension shaft nuts, respectively. The socket shall be provided with a set screw to fit the device. The direction of rotation shall be permanently shown with word and arrow next to the operating nut. The entire device shall be coated inside and out with a 2-part epoxy. The torque limiting device shall be as manufactured by Aunspach Controls Company of St. Louis, Missouri, or approved equal.
- 3.3.10.22 The exterior valve surfaces shall be shop painted with two coats of asphalt varnish conforming to Federal Specifications TT-C-434A.

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- 3.3.10.23 The plug valves shall be tested in accordance with ANSI/AWWA C517-09, Subsection 5.2. The Shell Test (5.2.1.1) shall be performed as stated, but the Seat Test (5.2.1.2, 5.2.1.3 and 5.2.1.4) shall be performed for both direct and reverse pressure at the either 150 or 100 psi minimum test pressure as specified for the valve(s) being purchased. The manufacturer shall furnish a certified test report with every valve stating that the particular valve has met the requirements of the production tests and that all proof of design tests and requirements as called for in Sections 5.2.2 and its Subsections for that size valve were successfully met. Final payment by the Water and Sewer Department will not be made until after receipt of these test reports.
- 3.3.10.24 Witnessed testing shall be performed within the continental United States. The Water and Sewer Department may send a representative to witness such test. If the Water and Sewer Department opts to witness such test, the bidder will be notified at the time the orders are placed. Every time a group of valves is ordered, they shall be tested consecutively, so that the Water and Sewer Department representative may be able to witness all tests in one trip.
- 3.3.10.25 Valves to be tested shall be complete with nameplates and serial numbers. Testing shall be at bidder's cost. The time and trip of the Water and Sewer Department's representative shall be at the Water and Sewer Department's expense. The bidder shall notify the Water and Sewer Department's representative at least 21 days prior to the tests, so that travel arrangements may be made. The bidder shall test the valves prior to the witness test. If it becomes necessary for the Water and Sewer Department's representative to return to witness a repeated test on a valve that has previously failed such test, the County representative's additional trip will be charged to the bidder at the rate of \$300.00 per day plus travel, local transportation, accommodations and meal expenses.

**3.3.11 Experimental, Trial and Replacement Valves**

Small numbers of a variety of valves are at times required for experimental and trial use by the Water and Sewer Department to keep up with developments in the industry and to check on manufacturer claims for their equipment. The Water and Sewer Department must also maintain in stock small numbers of non-standard valves as replacements for valves already built into the system. Further, at times valves of sizes, types and configurations not listed herein must be purchased as dictated by particular situations. The specifications for valves given herein shall apply, except where such specifications conflict with the design of the experimental, special, or replacement valve being ordered. However, all other requirements of that specification shall apply to the valve unless they are not applicable due to the basic design of the valve, or are cancelled by the ordering entity.

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3.3.12 Valve Parts

All parts supplied shall be new and must be of Original Equipment Manufacture (OEM) as recognized by the valve manufacturer. The following is a representative listing of the valve manufacturers presently in use by the Water and Sewer Department: Dezurik, Pratt, Olson, Keystone, Mueller, Kennedy, Dresser M+H, American Darling and Smith and Loveless. The preceding list is neither exclusive nor should be considered complete.

**3.4 TECHNICAL SPECIFICATIONS FOR CAST DUCTILE-IRON AND CAST GRAY-IRON PIPE AND FITTINGS**

3.4.1 "Evaluation Data" for Cast Ductile-Iron and Cast Gray-Iron Pipe and Fittings shall be defined as complete sets of factory information sheets (specifications, brochures, etc.), and catalog data (information showing construction of a typical length of pipe including details of standard and thrust resistant finished joints, and details of the fittings, specials, and appurtenances). The Evaluation Data, as a whole, must provide sufficient data to allow the County to ascertain that the proposed products meet all specifications.

3.4.2 General Requirements for Cast Ductile-Iron and Cast Gray-Iron Pipe and Fittings

3.4.2.1 All pipe and fittings to be furnished hereunder shall conform to the referenced ANSI and/or AWWA Standard, as modified in these Technical Specifications.

3.4.2.2 All markings required on pipe and fittings, shall be clearly legible and located such that they will not be hidden or destroyed when assembled into the intended system.

3.4.3 Pipe

3.4.3.1 All pipe shall be ductile iron pipe conforming to ANSI/AWWA Standard C151/A21.51-02, "Ductile-Iron Pipe, Centrifugally Cast, for Water". All pipe and fittings for water applications shall be in full compliance with ANSI/NSF 61, "Drinking Water System Components-Health Effects" and must be certified by NSF International.

3.4.3.2 The pipe thickness and outside diameter of pipe for sanitary sewer and water usage shall conform to Tables 1 and 2 (for push-on and mechanical joint pipe, respectively) of ANSI/AWWA Standard C151/A21.51-02 for the following sizes (The pressure class specified is the minimum permitted):

<u>Size</u>	<u>Pressure Class</u>
4-inch through 12-inch	350
14-inch through 20-inch	250
24-inch	200
30-inch through 54-inch	150

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- 3.4.3.3 For restrained joint pipe, the thickness of the pipe barrel remaining after grooves are cut, if required in the design of restrained end joints, shall not be less than the nominal wall thickness of equal sized non-restrained joint pipe as shown above.
- 3.4.3.4 Each piece of pipe shall be marked as required in Subsection 4.6 of AWWA C151-02. Letters and numerals on pipe sizes 12-inch and smaller shall be not less than 3/8-inch.
- 3.4.3.5 The County may require the use of "thickness" class pipe or higher pressure class pipe in applications where in the opinion of the Engineer (i.e. the Chief, Engineering Division, Water and Sewer Department or his representative) such use is in the best interest of the Department. The Engineer's decision in this regard shall be final.
- 3.4.3.6 A sufficient quantity of non-toxic vegetable soap lubricant shall be supplied with each order of pipe. The soap lubricant shall be suitable for use in sub aqueous trench conditions.
- 3.4.3.7 For flanged ductile-iron pipe with integrally cast flanges or threaded flanges, the nominal wall thickness of the pipe barrel shall be as specified in Paragraph 3.4.5.6 Flanged Joints.
- 3.4.3.8 The single gasket push-on pipe shall be shipped in standard 18-foot or 20-foot lengths, but not both. The restrained single-gasket push-on joint pipe shall be shipped in standard 18 or 20-foot lengths as specified above or fabricated lengths as noted in each order. At least two lengths of each size of single gasket push-on pipe furnished under each order shall be tested with circumferential gauges to insure that the pipe may be cut at any point along its length and have an outside diameter which will be within the manufacturer's standard design dimensions and tolerances for plain pipe. These lengths shall be identified with an easily distinguished, painted marking, longitudinally along the full length of the pipe.
- 3.4.4 Fittings
- 3.4.4.1 Fittings conforming to ANSI/AWWA C110/A21.11-98 (Water & Sewer Use).- Restrained push-on joint fittings shall be cast ductile iron for use with ductile-iron pipe as specified above. Standard mechanical joint, push-on joint and flanged joint fittings shall also be ductile iron for use with ductile-iron pipe as specified above. Cast ductile-iron fittings in the 3-inch through 24-inch size range shall be pressure rated at 350 psi, minimum; (except flange-joint fittings shall be rated at 250 psi, minimum); and in the 30-inch through 48-inch size range shall be pressure rated at 250 psi, minimum. All fittings with mechanical joints, flange joints and push-on joints shall conform to ANSI/AWWA Standard C110/A21.10-98, "Ductile-Iron and Gray-Iron Fittings, 3 In. Through 48 In., for Water and Other Liquids". In addition, fittings with mechanical joints and push-on joints shall



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conform to ANSI/AWWA Standard C111/A21.11-00, "Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings".

- 3.4.4.2 The weight of fittings shall be as given in ANSI/AWWA C110/A21.11-98 for ductile-iron fittings. The weight of mechanical joint fittings shall be as established in Tables 3 through 12. The weight of flanged joint fittings shall as established in Tables 13 through 20.
- 3.4.4.3 Fittings Conforming to ANSI/AWWA C153/A21.53-00 (Water & Sewer Use) - All fittings shall be cast ductile-iron for use with ductile-iron pipe as specified above. Fittings in the 3-inch through 24-inch size range shall be pressure rated at 350 psi, minimum; 30-inch through 48-inch size range shall be pressure rated at 250 psi, minimum; and in the 54-inch through 64-inch size range shall be pressure rated at 150 psi, minimum (except for those fittings such as plugs, caps, and sleeves which are normally rated at a higher pressure). No flanged fittings or mixtures of flanged with other end type fittings will be allowed in the range of 3-inch through 48-inch since they are not covered in the AWWA Standard. Flanged fittings conforming with and covered by this standard are allowed in sizes, 54, 60 and 64-inch. In conformance with the standard, 54, 60 and 64-inch flanged tees, crosses and reducers with outlets of smaller dimension as listed in ANSI/AWWA C153/A21.53-00 are permitted. All fittings with mechanical joints, flange joints and push-on joints shall conform to ANSI/AWWA Standard C153/A21.53-00, "Ductile-Iron Compact Fittings for Water Service". In addition, fittings with mechanical joints and push-on joints shall conform to ANSI/AWWA Standard C111/A21.11-00, "Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings" except as otherwise allowed in C153. Mechanical joint glands shall be ductile-iron only.
- 3.4.4.4 Since the C153 Standard provides only minimum dimensions, fully detailed drawings of all fittings proposed shall be supplied by the manufacturer with his bid. The tabulated nominal weight of each size and type of fitting shall also be supplied by the manufacturer for all items proposed. This weight shall be that of the bare casting prior to application of any lining or coating. Since the weight of fittings listed in the Standard are calculated based on nominal wall thickness and minimum laying lengths, these will be considered as the minimum acceptable weight of fittings submitted. Thus, any fitting submitted with a nominal weight less than that of the same fitting listed in C153-00 will not be acceptable. The weight of a fitting supplied under the contract shall not be less than the greater of: ninety-five (95) percent of the weight supplied by the manufacturer for that fitting or one hundred (100) percent of the weight of that fitting as specified in Standard C153. Further, the weight of fittings supplied shall not be more than five (5) percent above the tabulated nominal weight supplied with the bidder's submittal.

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3.4.5 Joints and Accessories

3.4.5.1 Push-On Type Joints (Single Gasket and Single Gasket with Gasket Restraint) - Push-on joints shall conform to ANSI/AWWA Standard C111/A21.11-00, except that the gaskets for pipe and fittings shall be neoprene where so specified.

3.4.5.2 The required number of gaskets for each push-on joint pipe plus one extra for every 50 joints or fraction thereof, shall be furnished with each order. The gaskets shall be shipped in suitable protective containers. All single gasket pipes shall be as manufactured by United States Pipe and Foundry Company (Tyton), by the American Cast Iron Pipe Company (Fastite), by McWane, Inc. (Mix of Tyton and Fastite), Tyler/Union (Tyton).

3.4.5.3 Push-on joints together with both their regular and gasket-restraint gaskets shall be of the design, dimensions and tolerances of either those provided by American Cast Iron Pipe Company (Fastite/Fast-Grip) or those provided by United States Pipe and Foundry Company (Tyton/Field Lok). No other designs shall be acceptable. If required by the Water and Sewer Department, the bidder shall supply complete design drawings, with dimensions, tolerances and materials of the joint and gasket being supplied within fourteen (14) calendar days of the date of receipt of the letter, fax or E-mail requiring said submission. If so required by the Water and Sewer Department, this submission shall be signed, sealed and dated by an Engineer registered to practice in the State where the manufacturer is located. If the pipe is of non-domestic origin, signing, sealing and dating of the submission, when required, shall be performed by an Engineer registered in the state where the bidder's main office is located or the State of Florida, at the discretion of the Chief, Engineering Division, Water and Sewer Department or his designee.

3.4.5.4 Mechanical Joints

3.4.5.4.1 Mechanical joints for fittings shall conform to ANSI/AWWA Standard C111/A21.11-00, except that the gaskets for each fitting under Groups D and D1 shall be neoprene. Bolt holes for mechanical joints shall be equally spaced, and shall straddle the vertical centerline. Tee head bolts and hexagonal nuts for all mechanical joints in fittings shall be of high strength low-alloy steel with composition, dimensions and threading as specified in ANSI/AWWA Standard C111/A21.11-00. Glands shall be of ductile-iron construction for ductile iron fittings, and cast gray iron or ductile iron for cast gray-iron fittings.

3.4.5.4.2 The proper number of gaskets, glands, bolts and nuts, all conforming to ANSI/AWWA Standard C111/A21.11-00, plus one extra gasket for every 10 joints or fraction

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thereof, shall be furnished with each order. The gaskets and joint accessories shall be shipped in suitable protective containers. Follower glands held in place with set screws will not be acceptable. Segmented glands will not be acceptable.

3.4.5.5      Restrained Push-on Joints (Single Gasket Non-Gasket Restrained)

- 3.4.5.5.1      Restrained joints in pipe and fittings shall be of the single gasket push-on type, and shall conform to all applicable provisions of ANSI/AWWA Standard C111/A21.11-00, except that gaskets for pipe and fittings shall be neoprene, where so specified, and the following requirements:
- 3.4.5.5.2      Thickness of the pipe barrel remaining at grooves cut, if required in the design of restrained end joints, shall not be less than the nominal wall thickness of equal sized non-restrained pipe as specified in Paragraph 3.4.3 above.
- 3.4.5.5.3      Restrained joints using field welding, set screws, or gaskets with expanding metal inserts will not be acceptable.
- 3.4.5.5.4      The restraining components, when not cast integrally with the pipe and fittings, shall be ductile iron or a high strength non-corrosive alloy steel.
- 3.4.5.5.5      Tee head bolts and hexagonal nuts for all restrained joints in pipe and fittings shall be of high strength low-alloy steel with composition, dimensions and threading as specified in ANSI/AWWA Standard C111/A21.11-00, except that the length of the bolts shall meet the requirements for the restrained joint design.
- 3.4.5.5.6      The proper number of gaskets, bolts, nuts and all necessary joint material, plus one extra gasket for every 10 joints or fraction thereof, shall be furnished with each order. The gaskets and joint accessories shall be shipped in suitable protection containers.
- 3.4.5.5.7      Each thrust-resistant joint and the pipe and fitting of which it is a part, shall be designed to withstand the axial thrust from an internal pipeline pressure of at least 150 psi at bulkhead conditions without reduction because of its position in the pipeline nor for support from external thrust blocks.
- 3.4.5.5.8      Restrained push-on joint pipe and fittings shall be capable of being deflected after assembly. During

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deflection, all components in the restrained system shall be in contact to provide an equal force on all contact areas.

- 3.4.5.5.9 When restrained spigot ends are ordered, the corresponding bell ends of the pipe to be restrained shall be furnished with the required matching restraining features at no additional cost other than the price bid per foot of pipe.

3.4.5.6 Flanged Joints

- 3.4.5.6.1 Connecting pieces with one end flanged and the other end either plain-end or mechanical joint, shall conform to ANSI/AWWA Standard C110/A21.10-98. Joint material for both the flanged end and the mechanical joint accessories for connecting pieces with a mechanical joint end shall be furnished as specified.
- 3.4.5.6.2 Other types of flanged fittings, and flanged pipe, shall conform to the following requirements unless otherwise stated in the order:
- 3.4.5.6.3 Flanged fittings shall conform to ANSI/AWWA Standard C110/A21.10-98, as specified hereinabove.
- 3.4.5.6.4 Flanged ductile-iron pipe with integrally cast flanges shall be manufactured in accordance with ANSI/AWWA Standard C151/A21.51-02, and with provisions contained hereinabove for centrifugally cast ductile iron pipe, and shall be furnished with ANSI Standard Class 125 flanges, plain faced and drilled, conforming to ANSI Standard B16.1, "Cast Iron Pipe Flanges and Flanged Fittings", latest revision. Hollow back flanges are not acceptable.
- 3.4.5.6.5 Flanged ductile-iron pipe with threaded flanges shall be manufactured in accordance with ANSI/AWWA Standard C115/A21.15-99, "Flanged Ductile-Iron Pipe With Ductile-Iron or Grey-Iron Threaded Flanges", and shall be rated for a working pressure of 250 psi, minimum. The nominal thickness of flanged ductile-iron pipe, 6-inch and larger, shall not be less than those shown in Table 1 of ANSI/AWWA Standard C115/A21.15-99. The nominal thickness of 4-inch flanged ductile-iron pipe shall be Class 54 (min.) conforming to Tables 3 and 4 of ANSI/AWWA Standard C151/A21.51-02. The pipe shall be furnished with ANSI Standard Class 125 flanges, plain faced and drilled, conforming to ANSI Standard B16.1, latest revision. Hollow back flanges and grey-iron flanges

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shall not be acceptable for use as threaded flanges. Threaded flanges shall be individually fitted and machine tightened on the threaded pipe by the manufacturer, and shall not be interchangeable in the field. Pipe lengths shall be as ordered. Removal of flanges, cutting and re-threading the pipe, and re-installing the flanges will not be permitted in any case.

- 3.4.5.6.6 All flanges on ductile-iron pipe and fittings shall be of ductile iron. All joint materials for flanged pipe and fittings, shall be supplied with all pipe or fittings ordered. Bolts and nuts shall comply with all requirements of Appendix Section A.1 of ANSI/AWWA Standard C115/A21.15-99 except that both shall be stainless steel. Unless ring gaskets are specifically called for in the order, gaskets shall be full-faced, and gaskets shall be of 1/8-inch thickness. Gaskets shall fully conform with the requirements of ANSI/AWWA Standard C115/A21.15-99 Appendix Section A.2 except that gaskets shall be SBR for water and neoprene for sewer usages.

3.4.6 Linings and Coatings

- 3.4.6.1 Asphaltic Coating - All pipe and fittings shall be outside-coated with an asphaltic material applied by means of the airless spray method. The exterior coating shall meet AWWA Specifications for this type of coating, shall be smooth without pinholes, thin, bare or overly thick areas. Smoothness shall be such that when hand rubbed, no "sand paper" feeling will be experienced and such that the spigot area will readily slide through the gasket without pulling, tearing, rolling or otherwise disturbing the sealing capabilities of the gasket. Spigot ends shall be beveled prior to painting and to an extent that will permit ready insertion of the spigot through the gasket area.
- 3.4.6.2 Cement-Mortar Lining - Pipe and fittings where so specified shall be cement-lined and seal-coated in accordance with ANSI/AWWA Standard C104/A21.4-95, "Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water".
- 3.4.6.3 Ceramic Epoxy Lining and Polyethylene Lining
- 3.4.6.3.1 Pipe and fittings where so specified shall be lined with either ceramic epoxy or virgin polyethylene. A bidder may supply one or the other material but not both in the same order.
- 3.4.6.3.2 Polyethylene shall be compounded with carbon black to resist exposure to the ultraviolet rays during open-air storage, and comply with ASTM Standard D1248-00a, "Polyethylene Plastics Molding and Extrusion

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Materials". Ceramic epoxy shall contain pigmentation to resist ultraviolet exposure under the same conditions.

3.4.6.4 Ceramic Epoxy

3.4.6.4.1 All ductile iron pipe and fittings shall be delivered to the application facility without asphalt, cement lining or other lining on the interior surface or the first 6 inches on the spigot end of the pipe exterior.

3.4.6.4.2 The only ceramic epoxy material approved by the Department at this time is a high-build multi-component Amine cured Novalac epoxy, Protecto 401, by Vulcan Painters, Inc. of Bessemer, AL 35021.

3.4.6.4.3 Material must meet the following criteria and be accompanied by certification of the following test results:

- i. A permeability rating of 0.00 when tested according to Method A of ASTM E96-00 "Test Method for Water Vapor Transmission of Materials", Procedure A with a test duration of 30 days.
- ii. The following test must be run on coupons from factory lined ductile iron pipe:
  1. ASTM B117 Salt Spray (scribed panel) - Results to equal no more than 0.5mm undercutting after one year.
  2. ASTM G95 Cathodic Disbondment 1.5 volts @ 77 degrees F. Results to equal no more than 0.5mm undercutting after 30 days.
  3. Immersion Testing rating using ASTM D714-87 (1994).
    - a. 20% Sulfuric Acid - No effect after one year.
    - b. 25% Sodium Hydroxide - No effect after one year.
    - c. 160 degree F. Distilled Water - No effect after one year.
    - d. 120 degree F. Tap Water (scribed panel) - 0.0 undercutting after one year with no effect.

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- iii. A statement from the manufacturer attesting to the fact that at least 20% of the volume of the lining contains ceramic quartz pigment.
- iv. A statement concerning recoatability and repair to the lining.

3.4.6.5 Application

- 3.4.6.5.1 The lining shall be applied by a competent firm with a successful history of applying linings to the interior of ductile iron pipe and fittings.
- 3.4.6.5.2 Surface Preparation - Prior to abrasive blasting, the entire area which will receive the protective compound shall be inspected for oil, grease, etc. Any areas where oil, grease or any substance which can be removed by solvent is present shall be solvent cleaned using the guidelines outlined in SSPC-1 Solvent Cleaning. After the surface has been made free of grease, oil or other substances, all areas to receive the protective compounds shall be abrasive blasted using compressed air nozzles with sand or grit abrasive media. The entire surface to be lined shall be struck with the blast media so that all rust, loose oxides, etc., are removed from the surface. Only slight stains and tightly adhering annealing oxide may be left on the surface. Any area where rust reappears before coating must be re-blasted to remove all rust.
- 3.4.6.5.3 Lining - After the surface preparation and within 8 hours of surface preparation, the interior of pipe and fittings shall receive a minimum forty (40) mils dry film thickness of the protective lining. No lining shall take place when the substrate or ambient temperature is below 40 degrees Fahrenheit. The surface also must be dry and dust free. If flange ends are included in the Project, the linings must not be used on the face of the flange; however, full face gaskets must be used to protect the ends of the pipe. The 40-mil system shall not be applied in the gasket grooves.
- 3.4.6.5.4 Coating of Gasket and Spigot Ends - Due to the tolerances involved, the gasket area and exterior of the spigot end for 6 inches back from the end of the spigot must be coated with six (6) mils minimum, ten (10) mils maximum of Protecto Joint Compound. This coating shall be applied by brush to ensure coverage. Care should be taken that the coating is smooth without excess buildup in the gasket groove or on the spigot end. All material for the gasket groove and spigot end

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shall be applied after the application of the lining as specified in the preceding paragraph.

3.4.6.5.5 Number of Coats - The number of coats of lining material applied shall be as recommended by the lining manufacturer. However, in no case shall this material be applied above the dry thickness per coat recommended by the lining manufacturer in printed literature. The time between coats shall never exceed that time recommended by the lining material manufacturer. No material shall be used for lining which is not indefinitely recoatable with itself without roughening the surface.

3.4.6.5.6 Touch-Up and Repair - Protecto Joint Compound shall be used for touch-up or repair. Procedures shall be in accordance with manufacturer's recommendations.

3.4.6.6 Inspection

3.4.6.6.1 All ductile iron pipe and fitting linings shall be checked for thickness using a magnetic film thickness gauge. The thickness testing shall be done using the method outlined in SSPC-PC-2 Film Thickness Rating.

3.4.6.6.2 The interior lining of all pipe and fittings shall be tested for pinholes with a nondestructive 2,500 volt test.

3.4.6.6.3 Each pipe joint and fitting shall be marked with the date of application of the lining system and with its numerical sequence of application on the date.

3.4.6.7 Certification

The pipe or fitting manufacturer must supply a certificate attesting to the fact that the applicator met the requirements of this specification, and that the material used was as specified, and that the material was applied as required by the specification.

3.4.6.8 Procedures for Sealing Cut Ends and Repairing Field Damaged Areas

3.4.6.8.1 Remove burrs caused by field cutting of ends or handling damage and smooth out the edge of the lining if rough.

3.4.6.8.2 Remove all traces of oil, grease, asphalt, dust, dirt, etc.

3.4.6.8.3 Areas of loose or damaged lining associated with field cutting the pipe shall be repaired, if approved by the Engineer, as recommended by the pipe manufacturer. The damaged area shall be stripped back by chiseling



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or scraping about 1 to 2 inches into the well-adhered lining before patching. The exposed metal and the 1 to 2-inch lining overlap shall be roughened with a coarse grade of emery cloth (#40 grit), rasp or small chisel. Avoid wire brushing or similar buffing since these tend to make the surface too smooth for good adhesion.

- 3.4.6.8.4 With the area to be sealed or repaired absolutely, clean and suitably roughened, apply a coat of Protecto Joint Compound by brush in accordance with the manufacturer's recommendations.

3.4.6.9 Polyethylene Lining

- 3.4.6.9.1 The polyethylene shall be fused to the pipe and fittings with heat to form a tightly bonded uniform lining 40 mils thick, minimum, extending from the spigot end to the gasket seat in the bell of push-on, restrained push-on and mechanical type joints.
- 3.4.6.9.2 Prior to preheating the pipe, 75% or more of the high-temperature oxide film shall be removed through proper preparation of pipe interior surface. Fittings shall be sand blasted. Pipe and fittings shall be uniformly preheated to a temperature adequate to provide uniform fusing of the polyethylene powders and proper bonding to the interior of the pipe and fittings.
- 3.4.6.9.3 The lining at the ends (spigot and bell) shall be hermetically sealed with a coal-tar epoxy. This epoxy shall coat the inside of the bell of both pipe and fitting as well as the last six inches on the inside of the spigot end of the pipe and two to three inches on the outside of the spigot end.
- 3.4.6.9.4 The lining of all pipe and fittings shall be subjected to and pass a test for pinholes, bare spots, metal particles, insufficient lining thickness and other defects by a method conforming to ASTM Standard G62-87 (1998), "Holiday Detection in Pipeline Coatings", Method B (high voltage). Other test methods may be submitted to the Department for approval, but no approval will be granted unless it is clearly shown to the satisfaction of the Water and Sewer Department that the method is equivalent to the specified tests insofar as detecting defects and insufficient lining thickness.
- 3.4.6.9.5 The manufacturer shall provide certifications on the holiday test as well as certifications on a uniform

**SECTION 3**  
**TECHNICAL SPECIFICATIONS**

(spigot end to gasket seat in bell) minimum 40-mils-thick lining.

3.4.7 Quality Assurance

- 3.4.7.1 All cast ductile-iron and cast gray-iron pipe, fittings and other materials supplied under this solicitation shall be subject to inspection while still on the delivery truck. The bidder shall arrange for this inspection by notifying the order's contact person 48-hours prior to delivery. When so notified, the Water and Sewer Department will make arrangements for inspection of the material upon arrival, or within a reasonable time thereafter. Material will not be unloaded without inspection taking place, either before or, if necessary for examination, during unloading. The County will not be responsible for any delays or additional costs created by a bidder's failure to arrange for the inspection.
- 3.4.7.2 Materials shall be delivered in compliance with the AWWA Standards as modified herein, without damage, and shall match or exceed the quality of any samples supplied.
- 3.4.7.3 Materials found to be defective, not in strict compliance with the quality standards of samples supplied or these specifications, shall be immediately returned to the bidder at his expense. If defects are discovered at a later time, the bidder shall be required to remove said items and shall bare all costs for so doing together with any replacement costs. Rejection of items may subject the bidder to termination from the contract for default.
- 3.4.7.4 Foundries supplying materials shall maintain their metallurgical records for a minimum period of two (2) years after fabrication and firms not doing so may be found in default.
- 3.4.7.5 Flaws which provide cause for rejection include but are not limited to; incorrect metallurgy or metallurgy which cannot be verified to the complete satisfaction of the Engineer; foundry identification/location, size, pressure and material identification information lost, removed, non-existent, or not visible when assembled; not in complete compliance with all applicable AWWA Standards as modified herein and/or these specifications; not in compliance with NSF; not in compliance with approved shop drawings; out of roundness in excess of AWWA requirements; dimensional differences in excess of AWWA requirements; rough exterior coating; chipped, cracked, scratched or otherwise damaged interior or exterior coatings or linings; interior or exterior coatings which are too thin; coatings too thick to allow proper assembly; coatings too thick to allow proper grip by restraining gaskets or other restraining elements; pin holes or honey combing of pipe; weld spatter or excess metal in gasket grooves or the whole of the bell area; bell areas which are distorted or otherwise improperly cast; spigots which are out of round, not of proper dimension, or not beveled to an extent that will allow easy assembly of the pipe joint;

**SECTION 3**  
**TECHNICAL SPECIFICATIONS**

gaskets which are defective or of the wrong material; lack of joint materials; improper or defective joint materials; bolting of the wrong material or size; electro galvanizing or other exterior plating when hot-dip galvanizing is required; incorrect, flawed or damaged interior coating or lining; lack or non-submittal of all required certifications; non-timely submission of certifications; incorrect/incomplete certifications or certifications lacking the signature, date and seal of a professional engineer when so required; flanges which are too thin, not a right angles to the pipe centerline, or otherwise distorted; together with all other flaws or defects which in the opinion of the Engineer, who's decision shall be final, adversely affect the assembly and/or function of the piping system as intended.

3.4.8 Purchase Groups - The Water and Sewer Department typically purchases cast ductile-iron and cast gray-iron pipes and fittings as follows:

- 3.4.8.1 Single Gasket Push-On Ductile-Iron Pipe (including 54-Inch Single Gasket Push-On Ductile-Iron Pipe)
- 3.4.8.2 Cast Ductile-Iron Fittings, Mechanical Joint (Cement-Lined) – Conforming to ANSI/AWWA C110/A21.11-98
- 3.4.8.3 Cast Ductile-Iron Fittings, Mechanical Joint (Cement-Lined) – Conforming to ANSI/AWWA C153/A21.53-00
- 3.4.8.4 Cast Ductile-Iron Fittings, Mechanical Joint (Polyethylene/Ceramic Epoxy-Lined) – Conforming to ANSI/AWWA C110/A21.11-98
- 3.4.8.5 Cast Ductile-Iron Fittings, Mechanical Joint (Polyethylene/Ceramic Epoxy-Lined) – Conforming to ANSI/AWWA C153/A21.53-00
- 3.4.8.6 Cast Ductile-Iron Fittings, Restrained Joint – Conforming to ANSI/AWWA C110/A21.11-98 or C153/A21.53-00
- 3.4.8.7 Cast Ductile-Iron Fittings, Push-On Joint (Polyethylene/Ceramic Epoxy-Lined) – Conforming to ANSI/AWWA C110/A21.11-98 or C153/A21.53-00 with Neoprene Push-On Joint Restraint Gaskets
- 3.4.8.8 Cast Ductile-Iron Fittings, Push-On Joint (Cement-Lined) – Conforming to ANSI/AWWA C110/A21.11-98 or C153/A21.53-00 with Cast Ductile/Gray-Iron Fittings, Push-On Joint (Cement-Lined)

3.4.9 Test Reports and Certifications

- 3.4.9.1 Notarized Statement

Bidders must provide notarized statements from the manufacturers of the products affirming that all inspections and tests have been performed, that the results are in conformance with all specifications, and that the referenced governing standards have been met by all pipe and fittings shipped. Statements must include the certifications specified in Paragraph 3.4.3 Linings and Coatings. Statements shall

**SECTION 3**  
**TECHNICAL SPECIFICATIONS**

be provided with each invoice, and shall identify the pipe and fittings certified by the Water and Sewer Department order number.

3.4.9.2 The term "manufactured" shall mean the actual casting of the component in question and the "manufacturer" is the foundry performing said casting operation. In this context, assembly of components shall not qualify as manufacture. Materials which are not domestically manufactured or which have components which are not domestically manufactured shall conform to the following additional requirements:

3.4.9.2.1 The bidder shall include the name, casting mark, address and country of the foundry producing each of the particular components. Further, this foundry shall not be changed without obtaining written permission from the Chief, Engineering Division, Water and Sewer Department. If requested in writing, certified copies of foundry records shall be supplied to Water and Sewer Department within twenty-one (21) calendar days after request at no charge. If not in English, these records shall be accompanied by a certified translation.

3.4.9.2.2 Each shipment of non-domestic manufactured materials shall be accompanied by a certification specifically stating that the materials of that shipment comply with all requirements of this solicitation, specifically including dimensions and tolerances, passing all required tests and certifications, materials of manufacture, weights of components, marking and foundry of origin. When required by the Water and Sewer Department this certification shall be signed, dated and sealed by a registered professional engineer licensed to practice in the state where the supplying firm is located. The original of this certification shall be shipped with the materials and a copy clearly showing the seal, signature and date or a second original, shall be sent to the Supervisor, Specifications Unit, Miami-Dade Water and Sewer Department, P. O. Box 330316, Miami, Florida 33233-0316. Shipments sent without the certification as required above may not be accepted.

**SECTION 4**  
**BID SUBMITTAL FORM**

**Submit Bid To:****CLERK OF THE BOARD****Stephen P. Clark Center****111 NW 1<sup>st</sup> Street****17<sup>th</sup> Floor, Suite 202****Miami, Florida 33128-1983**

**OPENING: 2:00 P.M.**  
**WEDNESDAY**  
**DECEMBER 12, 2012**



QUOTE PRICES F.O.B. DESTINATION, FREIGHT ALLOWED, LESS TAXES, DELIVERED IN MIAMI-DADE COUNTY, FLORIDA

NOTE: Miami-Dade County is exempt from all taxes (Federal, State, Local). Bid prices should be less all taxes. Tax Exemption Certificate furnished upon request.

Issued by:	ISD/PM	Date Issued: 11/20/12	This Bid Submittal Consists of Pages 51 through 56
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Sealed bids are subject to the Terms and Conditions of this Invitation to Bid and the accompanying Bid Submittal. Such other contract provisions, specifications, drawings or other data as are attached or incorporated by reference in the Bid Submittal, will be received at the office of the Clerk of the Board at the address shown above until the above stated time and date, and at that time, publicly opened for furnishing the supplies or services described in the accompanying Bid Submittal Requirement.

**Title:**  
**PIPE AND FITTINGS FOR WATER AND WASTEWATER SERVICE,**  
**PREQUALIFICATION OF PRODUCTS AND BIDDERS**

Bid Deposit: Not Applicable to the Solicitation; May Apply to Specific Purchases

Performance Bond: Not Applicable to the Solicitation; May Apply to Specific Purchases

**DO NOT WRITE IN THIS SPACE**

ACCEPTED \_\_\_\_\_ HIGHER THAN LOW \_\_\_\_\_  
 NON-RESPONSIVE \_\_\_\_\_ NON-RESPONSIBLE \_\_\_\_\_

COMMODITY CODE: **670-75**

Procurement Officer: Maggie Reynaldos

FIRM NAME: \_\_\_\_\_

**RETURN ONE ORIGINAL AND TWO COPIES OF BID SUBMITTAL PAGES, REQUESTED ATTACHMENTS AND AFFIDAVITS.**

**FAILURE TO COMPLETE THE CERTIFICATION REGARDING LOCAL PREFERENCE ON THE BID SUBMITTAL FORM IN SECTION 4 WILL RENDER THE BIDDER INELIGIBLE FOR LOCAL PREFERENCE.**

**FAILURE TO SIGN THE BID SUBMITTAL FORM IN SECTION 4 WILL RENDER YOUR BID NON-RESPONSIVE.**

**SECTION 4**  
**BID SUBMITTAL FOR:**  
**PIPE AND FITTINGS FOR WATER AND WASTEWATER SERVICE, PREQUALIFICATION OF**  
**PRODUCTS AND BIDDERS**

**FIRM NAME:** \_\_\_\_\_

**TO BE COMPLETED BY ALL BIDDERS**

Refer to Paragraph 2.6 to make sure that your firm's responses and attachments comply with the solicitation's requirements.	
<u>Reference:</u>	<u>Summarized Requirement:</u>
Paragraph 2.6.2.1	<p>Provide your firm's complete office address:</p> <p>_____</p> <p>_____</p> <p>_____</p>
Paragraph 2.6.2.1	<p>Enter your firm's facsimile (FAX) machine number, including area code:</p> <p>Fax No.: _____</p> <p>AND / OR</p> <p>Enter your firm's e-mail address:</p> <p>E-mail: _____</p>

**SECTION 4  
BID SUBMITTAL FOR:**

**PIPE AND FITTINGS FOR WATER AND WASTEWATER SERVICE, PREQUALIFICATION OF PRODUCTS AND BIDDERS**

**FIRM NAME:** \_\_\_\_\_

**TO BE COMPLETED BY ALL BIDDERS**

Enter the information requested for the products proposed by your firm. Do not propose products if they are not fully supported by the required attachments.

<u>Manufacturer / Brand Name</u> ↓	<u>Model No.</u> ↓	<u>Product Description</u> ↓	<u>Size</u> ↓	<u>Describe the proof of manufacturer authorization submitted</u> (Re: Paragraph 2.6.2.2) ↓	<u>Describe the Evaluation Data</u> (Re: Paragraph 2.6.2.3.1 and Technical Specifications) ↓
Ex: EFG	Ex: Model 123	Ex: 150 PSI Flanged Plug Valve with Handwheel	Ex: 4" to 16"	Ex: Visit EFG's website: <a href="mailto:brandreps@make.com">brandreps@make.com</a>	Ex: Catalogue Data, Weight Information & Assembly Drawings Attached
Ex: HIJ	Ex: N/A	Ex: Single Gasket Push-On Ductile- Iron Pipe, Pressure Class 350, Cement Lined W' SBR Gasket	Ex: 4" to 12"	Ex: Letter from "HIJ" (manufacturer) attached	Ex: Factory Information Sheets and Catalog Data attached

(Copy this page as necessary to list additional products)

**SECTION 4  
BID SUBMITTAL FOR:**

**PIPE AND FITTINGS FOR WATER AND WASTEWATER SERVICE,  
PREQUALIFICATION OF PRODUCTS AND BIDDERS**

**ACKNOWLEDGEMENT OF ADDENDA**

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**INSTRUCTIONS:** COMPLETE PART I OR PART II, WHICHEVER APPLIES

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**PART I:**

LIST BELOW ARE THE DATES OF ISSUE FOR EACH ADDENDUM RECEIVED IN  
CONNECTION WITH THIS BID

Addendum #1, Dated \_\_\_\_\_

Addendum #2, Dated \_\_\_\_\_

Addendum #3, Dated \_\_\_\_\_

Addendum #4, Dated \_\_\_\_\_

Addendum #5, Dated \_\_\_\_\_

Addendum #6, Dated \_\_\_\_\_

Addendum #7, Dated \_\_\_\_\_

Addendum #8, Dated \_\_\_\_\_

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**PART II:**

☐ NO ADDENDUM WAS RECEIVED IN CONNECTION WITH THIS BID

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**FIRM NAME:** \_\_\_\_\_

**AUTHORIZED SIGNATURE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**TITLE OF OFFICER:** \_\_\_\_\_



**Bid Title: Pipe and Fittings for Water and Wastewater Service, Prequalification of Products and Bidders**

By signing this Bid Submittal Form the Bidder certifies that it satisfies all legal requirements (as an entity) to do business with the County, including all Conflict of Interest and Code of Ethics provisions in Section 2-11 of the Miami-Dade County Code. Any County employee or member of his or her immediate family seeking to contract with the County shall seek a conflict of interest opinion from the Miami-Dade County Ethics Commission prior to submittal of a Bid response or application of any type to contract with the County by the employee or his or her immediate family and file a copy of that request for opinion and any opinion or waiver from the Board of County Commissioners with the Clerk of the Board. The affected employee shall file with the Clerk of the Board a statement in a form satisfactory to the Clerk disclosing the employee's interest or the interest of his or her immediate family in the proposed contract and the nature of the intended contract at the same time as or before submitting a Bid, response, or application of any type to contract with the County. Also a copy of the request for a conflict of interest opinion from the Ethics Commission and any corresponding opinion, or any waiver issued by the Board of County Commissioners, must be submitted with the response to the solicitation.

In accordance with Sec. 2-11.1(s) of the County Code as amended, prior to conducting any lobbying regarding this solicitation, the Bidder must file the appropriate form with the Clerk of the Board stating that a particular lobbyist is authorized to represent the Bidder. Failure to file the appropriate form in relation to each solicitation may be considered as evidence that the Bidder is not a responsible contractor.

The Bidder confirms that this Bid is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a Bid for the same goods and/or services and in all respects is without collusion, and that the Bidder will accept any resultant award. Further, the undersigned acknowledges that award of a contract is contingent upon vendor registration. Failure to register as a vendor within the specified time may result in your firm not being considered for award.

Pursuant to Miami-Dade County Ordinance 94-34, any individual, corporation, partnership, joint venture or other legal entity having an officer, director, or executive who has been convicted of a felony during the past ten (10) years shall disclose this information at the time of bid or proposal submission.

☐ **Place a check mark here only if bidder has such conviction to disclose.**

By executing this proposal through a duly authorized representative, the proposer certifies that the proposer is not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, as those terms are used and defined in sections 287.135 and 215.473 of the Florida Statutes. In the event that the proposer is unable to provide such certification but still seeks to be considered for award of this solicitation, the proposer shall execute the proposal through a duly authorized representative and shall also initial this space: \_\_\_\_\_. In such event, the proposer shall furnish together with its proposal a duly executed written explanation of the facts supporting any exception to the requirement for certification that it claims under Section 287.135 of the Florida Statutes. The proposer agrees to cooperate fully with the County in any investigation undertaken by the County to determine whether the claimed exception would be applicable. The County shall have the right to terminate any contract resulting from this solicitation for default if the proposer is found to have submitted a false certification or to have been placed on the Scrutinized Companies for Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List.

**LOCAL PREFERENCE CERTIFICATION:** For the purpose of this certification, a "local business" is a business located within the limits of Miami-Dade County (or Broward County in accordance with the Interlocal Agreement between the two counties) that conforms with the provisions of Section 1.10 of the General Terms and Conditions of this solicitation and contributes to the economic development of the community in a verifiable and measurable way. This may include, but not be limited to, the retention and expansion of employment opportunities and the support and increase to the County's tax base.

☐ **Place a check mark here only if affirming bidder meets requirements for Local Preference. Failure to complete this certification at this time (by checking the box above) may render the vendor ineligible for Local Preference.**

**LOCALLY-HEADQUARTERED BUSINESS CERTIFICATION:** For the purpose of this certification, a "locally-headquartered business" is a Local Business whose "principal place of business" is in Miami-Dade County, as defined in Section 1.10 of the General Terms and Conditions of this solicitation.

☐ **Place a check mark here only if affirming bidder meets requirements for the Locally-Headquartered Preference (LHP). Failure to complete this certification at this time (by checking the box above) may render the vendor ineligible for the LHP. The address of the locally-headquartered office is \_\_\_\_\_.**



**LOCAL CERTIFIED SERVICE-DISABLED VETERAN BUSINESS ENTERPRISE CERTIFICATION:** A Local Certified Service-Disabled Veteran Business Enterprise is a firm that is (a) a local business pursuant to Section 2-8.5 of the Code of Miami-Dade County and (b) prior to bid submission is certified by the State of Florida Department of Management Services as a service-disabled veteran business enterprise pursuant to Section 295.187 of the Florida Statutes.

☐ Place a check mark here only if affirming bidder is a Local Certified Service-Disabled Veteran Business Enterprise. A copy of the certification must be submitted with this proposal.

**COUNTY USER ACCESS PROGRAM (UAP): Joint purchase and entity revenue sharing program**

For the County's information, the bidder is requested to indicate, at 'A' and 'B' below, its general interest in participating in the Joint Purchase Program of the County User Access Program (UAP) described in Section 2.21 of this contract solicitation, if that section is present in this solicitation document. Bidder participation in the Joint Purchase portion of the UAP is **voluntary**, and the bidder's expression of general interest at 'A' and 'B' below is for the County's information only and **shall not be binding** on the bidder.

- A. If awarded this County contract, would you be interest in participating in the Joint Purchase portion of the UAP with respect to other governmental, quasi-governmental or not-for-profit entities located **within** the geographical boundaries of Miami-Dade County?

Yes \_\_\_\_\_ No \_\_\_\_\_

- B. If awarded this County contract, would you be interested in participating in the Joint Purchase portion of the UAP with respect to other governmental, quasi-governmental or not-for-profit entities located **outside** the geographical boundaries of Miami-Dade County?

Yes \_\_\_\_\_ No \_\_\_\_\_

Firm Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

Mailing Address (if different): \_\_\_\_\_

Telephone No.: \_\_\_\_\_ Fax No.: \_\_\_\_\_

Email Address: \_\_\_\_\_ FEIN No. \_\_\_\_/\_\_\_\_/\_\_\_\_/\_\_\_\_/\_\_\_\_/\_\_\_\_/\_\_\_\_/\_\_\_\_

Prompt Payment Terms: \_\_\_\_% \_\_\_\_ days net \_\_\_\_ days (Please see paragraph 1.2 H of General Terms and Conditions)

Signature: \_\_\_\_\_ (Signature of authorized agent)

**\*"By signing this document the bidder agrees to all Terms and Conditions of this Solicitation and the resulting Contract."**

Print Name: \_\_\_\_\_ Title: \_\_\_\_\_

**THE EXECUTION OF THIS FORM CONSTITUTES THE UNEQUIVOCAL OFFER OF PROPOSER TO BE BOUND BY THE TERMS OF ITS PROPOSAL. FAILURE TO SIGN THIS SOLICITATION WHERE INDICATED ABOVE BY AN AUTHORIZED REPRESENTATIVE SHALL RENDER THE PROPOSAL NON-RESPONSIVE. THE COUNTY MAY, HOWEVER, IN ITS SOLE DISCRETION, ACCEPT ANY PROPOSAL THAT INCLUDES AN EXECUTED DOCUMENT WHICH UNEQUIVOCALLY BINDS THE PROPOSER TO THE TERMS OF ITS OFFER.**



# **APPENDIX**

## **AFFIDAVITS** **FORMAL BIDS**



Miami-Dade County  
Internal Services Department  
Procurement Management Division  
**Affirmation of Vendor Affidavits**

In accordance with Ordinance 07-143 amending Section 2-8.1 of the Code of Miami-Dade County, effective June 1, 2008, vendors are required to complete a new Vendor Registration Package, including a Uniform Affidavit Packet (Vendor Affidavits Form), before being awarded a new contract. The undersigned affirms that the Vendor Affidavits Form submitted with the Vendor Registration Package is current, complete and accurate for each affidavit listed below.

**Contract No. :** \_\_\_\_\_ **Federal Employer Identification Number (FEIN):** \_\_\_\_\_

**Contract Title:** \_\_\_\_\_

**Affidavits and Legislation/ Governing Body**

1. <b>Miami-Dade County Ownership Disclosure</b> Sec. 2-8.1 of the County Code	6. <b>Miami-Dade County Vendor Obligation to County</b> Section 2-8.1 of the County Code
2. <b>Miami-Dade County Employment Disclosure</b> County Ordinance No. 90-133, amending Section 2-8-1(d)(2) of the County Code	7. <b>Miami-Dade County Code of Business Ethics</b> Article 1, Section 2-8.1(i) and 2-11(b)(1) of the County Code through (d) and (9) of the County Code and County Ordinance No 00-1 amending Section 2-11.1(c) of the County Code
3. <b>Miami-Dade County Employment Drug-free Workplace Certification</b> Section 2-8.1.2(b) of the County Code	8. <b>Miami-Dade County Family Leave</b> Article V of Chapter 11 of the County Code
4. <b>Miami-Dade County Disability Non-Discrimination</b> Article 1, Section 2-8.1.5 Resolution R182-00 amending R-385-95	9. <b>Miami-Dade County Living Wage</b> Section 2-8.9 of the County Code
5. <b>Miami-Dade County Debarment Disclosure</b> Section 10.38 of the County Code	10. <b>Miami-Dade County Domestic Leave and Reporting</b> Article 8, Section 11A-60 11A-67 of the County Code

_____	_____	_____
Printed Name of Affiant	Printed Title of Affiant	Signature of Affiant
_____		
Name of Firm		Date
_____		
Address of Firm	State	Zip Code

**Notary Public Information**

Notary Public – State of \_\_\_\_\_ County of \_\_\_\_\_

**Subscribed and sworn to** (or affirmed) before me this \_\_\_\_\_ day of, \_\_\_\_\_ 20 \_\_\_\_\_.

by \_\_\_\_\_ He or she is personally known to me ☐ or has produced identification ☐

Type of identification produced \_\_\_\_\_

_____	_____	_____
Signature of Notary Public	Serial Number	
_____		
Print or Stamp of Notary Public	Expiration Date	Notary Public Seal

**In compliance with Miami-Dade County Ordinance 97-35, the Bidder shall submit with the bid proposal a detailed statement of its policies and procedures (use separate sheet if necessary) for awarding subcontractors in accordance with Section 1, Paragraph 1.15**

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Signature

Date \_\_\_\_\_

Firm Name of Prime Contractor/Respondent \_\_\_\_\_ FEIN # \_\_\_\_\_  
Project/Contract Number \_\_\_\_\_

In accordance with Sections 2-8.1, 2-8.8 and 10.34 of the Miami-Dade County Code, this form must be submitted as a condition of award by all bidders/respondents on County contracts for purchase of supplies, materials or services, including professional services which involve expenditures of \$100,000 or more, and all bidders/respondents on County or Public Health Trust construction contracts which involve expenditures of \$100,000 or more. The bidder/respondent who is awarded this bid/contract shall not change or substitute first tier subcontractors or direct suppliers or the portions of the contract work to be performed or materials to be supplied from those identified, except upon written approval of the County. The bidder/respondent should enter the word "NONE" under the appropriate heading of this form if no subcontractors or suppliers will be used on the contract.

In accordance with Ordinance No. 11-90, an entity contracting with the County shall report the race, gender and ethnic origin of the owners and employees of all first tier subcontractors/suppliers. In the event that the successful bidder demonstrates to the County prior to award that the race, gender, and ethnic information is not reasonably available at that time, the successful bidder shall be obligated to exercise diligent efforts to obtain that information and provide the same to the County not later than ten (10) days after it becomes available and, in any event, prior to final payment under the contract.

(Please duplicate this form if additional space is needed.)

Business Name and Address of First Tier Subcontractor/ Subconsultant	Principal Owner	Scope of Work to be Performed by Subcontractor/ Subconsultant	Principal Owner (Enter the number of male and female owners by race/ethnicity)								Employee(s) (Enter the number of male and female employees and the number of employees by race/ethnicity)							
			Gender		Race/Ethnicity						Gender		Race/Ethnicity					
			M	F	White	Black	Hispanic	Asian/Pacific Islander	Native American/Native Alaskan	Other	M	F	White	Black	Hispanic	Asian/Pacific Islander	Native American/Native Alaskan	Other
Business Name and Address of First Tier Direct Supplier	Principal Owner	Supplies/Materials/ Services to be Provided by Supplier	Principal Owner (Enter the number of male and female owners by race/ethnicity)								Employee(s) (Enter the number of male and female employees and the number of employees by race/ethnicity)							
			Gender		Race/Ethnicity						Gender		Race/Ethnicity					
			M	F	White	Black	Hispanic	Asian/Pacific Islander	Native American/Native Alaskan	Other	M	F	White	Black	Hispanic	Asian/Pacific Islander	Native American/Native Alaskan	Other

☐ Mark here if race, gender and ethnicity information is not available and will be provided at a later date. This data may be submitted to Contracting/User department or on-line to the Small Business Development Division of the Regulatory and Economic Resources Department at <http://new.miamidade.gov/business/business-development.asp>.

I certify that the representations contained in this Subcontractor/Supplier listing are to the best of my knowledge true and accurate.

Signature of Bidder/Respondent \_\_\_\_\_ Print Name \_\_\_\_\_ Print Title \_\_\_\_\_ Date \_\_\_\_\_